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Extreme SuperHyperConnectivities

Ideas | Approaches | Accessibility | Availability

Dr. Henry Garrett

Report | Exposition | References | Research #22 2023

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In this research book, there are some research chapters on researches on the basic properties, the research book starts to make more understandable.

Some studies and researches about neutrosophic graphs, are proposed as book in the following by Henry Garrett (2022) which is indexed by Google Scholar and has more than 2498 readers in Scribd. It's titled "Beyond Neutrosophic Graphs" and published by Ohio: E-publishing: Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United State. This research book covers different types of notions and settings in neutrosophic graph theory and neutrosophic SuperHyperGraph theory.

[Ref] Henry Garrett, (2022). "Beyond Neutrosophic Graphs", Ohio: E-publishing: Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United States. ISBN: 978-1-59973-725-6 (http://fs.unm.edu/BeyondNeutrosophicGraphs.pdf).

Also, some studies and researches about neutrosophic graphs, are proposed as book in the following by Henry Garrett (2022) which is indexed by Google Scholar and has more than 3218 readers in Scribd. It's titled "Neutrosophic Duality" and published by Florida: GLOBAL KNOWLEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. This research book presents different types of notions SuperHyperResolving and SuperHyperDominating in the setting of duality in neutrosophic graph theory and neutrosophic SuperHyperGraph theory. This research book has scrutiny on the complement of the intended set and the intended set, simultaneously. It's smart to consider a set but acting on its complement that what's done in this research book which is popular in the terms of high readers in Scribd.

[Ref] Henry Garrett, (2022). "Neutrosophic Duality", Florida: GLOBAL KNOW- LEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. ISBN: 978-1-59973-743-0 (http://fs.unm.edu/NeutrosophicDuality.pdf).

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CHAPTER 1

Abstract

In this research book, there are some research chapters on "Extreme SuperHyperConnectivities" and "Neutrosophic SuperHyperConnectivities" about some researches on SuperHyperConnectivities by two (Extreme/Neutrosophic) notions, namely, Extreme SuperHyperConnectivities and Neutrosophic SuperHyperConnectivities. With researches on the basic properties, the research book starts to make Extreme SuperHyperConnectivities theory and Neutrosophic SuperHyperConnectivities theory more (Extremely/Neutrosophicly) understandable.

In the some chapters, in some researches, new setting is introduced for new SuperHyperNotions, namely, a SuperHyperConnectivities and Neutrosophic SuperHyperConnectivities . Two different types of SuperHyperDefinitions are debut for them but the research goes further and the SuperHyperNotion, SuperHyperUniform, and SuperHyperClass based on that are well-defined and well-reviewed. The literature review is implemented in the whole of this research. For shining the elegancy and the significancy of this research, the comparison between this SuperHyperNotion with other SuperHyperNotions and fundamental SuperHyperNumbers are featured. The definitions are followed by the examples and the instances thus the clarifications are driven with different tools. The applications are figured out to make sense about the theoretical aspect of this ongoing research. The "Cancer's Recognition" are the under research to figure out the challenges make sense about ongoing and upcoming research. The special case is up. The cells are viewed in the deemed ways. There are different types of them. Some of them are individuals and some of them are well-modeled by the group of cells. These types are all officially called "SuperHyperVertex" but the relations amid them all officially called "SuperHyperEdge". The frameworks "SuperHyperGraph" and "Neutrosophic SuperHyperGraph" are chosen and elected to research about "Cancer's Recognition". Thus these complex and dense SuperHyperModels open up some avenues to research on theoretical segments and "Cancer's Recognition". Some avenues are posed to pursue this research. It's also officially collected in the form of some questions and some problems. Assume a SuperHyperGraph. Then an Extreme SuperHyperConnectivities $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum cardinality of a SuperHyperSet S of high cardinality SuperHyperEdges such that there's no SuperHyperVertex not to in a SuperHyperEdge and there's no SuperHyperEdge to have a SuperHyperVertex in a SuperHyperEdge; a Neutrosophic SuperHyperConnectivities $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Neutrosophic cardinality of a Neutrosophic SuperHyperSet S of high Neutrosophic cardinality Neutrosophic SuperHyperEdges such that there's no Neutrosophic SuperHyperVertex not to in a Neutrosophic SuperHyperEdge and there's no Neutrosophic SuperHyperEdge to have a Neutrosophic SuperHyperVertex in a Neutro-

sophic SuperHyperEdge; an Extreme SuperHyperConnectivities SuperHyperPolynomial $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the coefficients defined as the number of the maximum cardinality of a SuperHyperSet S of high cardinality SuperHyperEdges such that there's no SuperHyperVertex not to in a SuperHyperEdge and there's no SuperHyperEdge to have a SuperHyperVertex in a SuperHyperEdge and the power is corresponded to its coefficient; a Neutrosophic SuperHyperConnectivities SuperHyperPolynomial $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Neutrosophic SuperHyperPolynomial contains the Neutrosophic coefficients defined as the Neutrosophic number of the maximum Neutrosophic cardinality of a Neutrosophic SuperHyperSet S of high Neutrosophic cardinality Neutrosophic SuperHyperEdges such that there's no Neutrosophic SuperHyperVertex not to in a Neutrosophic SuperHyperEdge and there's no Neutrosophic SuperHyperEdge to have a Neutrosophic SuperHyperVertex in a Neutrosophic SuperHyperEdge and the Neutrosophic power is Neutrosophicly corresponded to its Neutrosophic coefficient; an Extreme R-SuperHyperConnectivities $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum cardinality of a SuperHyperSet S of high cardinality SuperHyperVertices such that there's no SuperHyperVertex not to in a SuperHyperEdge and there's no SuperHyperEdge to have a SuperHyperVertex in a SuperHyperEdge; a Neutrosophic R-SuperHyperConnectivities $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Neutrosophic cardinality of a Neutrosophic SuperHyperSet S of high Neutrosophic cardinality Neutrosophic SuperHyperVertices such that there's no Neutrosophic SuperHyperVertex not to in a Neutrosophic SuperHyperEdge and there's no Neutrosophic SuperHyperEdge to have a Neutrosophic SuperHyperVertex in a Neutrosophic SuperHyperEdge; an Extreme R-SuperHyperConnectivities SuperHyperPolynomial $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the coefficients defined as the number of the maximum cardinality of a SuperHyperSet S of high cardinality SuperHyperVertices such that there's no SuperHyperVertex not to in a SuperHyperEdge and there's no SuperHyperEdge to have a SuperHyperVertex in a SuperHyperEdge and the power is corresponded to its coefficient; a Neutrosophic R-SuperHyperConnectivities SuperHyperPolynomial $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Neutrosophic SuperHyperPolynomial contains the Neutrosophic coefficients defined as the Neutrosophic number of the maximum Neutrosophic cardinality of a Neutrosophic SuperHyperSet S of high Neutrosophic cardinality Neutrosophic SuperHyperVertices such that there's no Neutrosophic SuperHyperVertex not to in a Neutrosophic SuperHyperEdge and there's no Neutrosophic SuperHyperEdge to have a Neutrosophic SuperHyperVertex in a Neutrosophic SuperHyperEdge and the Neutrosophic power is Neutrosophicly corresponded to its Neutrosophic coefficient. Assume a SuperHyperGraph. Then $\delta-$SuperHyperConnectivities is a maximal of SuperHyperVertices with a maximum cardinality such that either of the following expressions hold for the (Neutrosophic) cardinalities of SuperHyperNeighbors of $s \in S$: there are $|S \cap N(s)| > |S \cap (V \setminus N(s))| + \delta$; and $|S \cap N(s)| < |S \cap (V \setminus N(s))| + \delta$. The first Expression, holds if S is an $\delta-$SuperHyperOffensive. And the second Expression, holds if S is an $\delta-$SuperHyperDefensive; a Neutrosophic $\delta-$SuperHyperConnectivities is a maximal Neutrosophic of SuperHyperVertices with maximum Neutrosophic cardinality such that either of the following expressions hold for the Neutrosophic cardinalities of SuperHyperNeighbors of $s \in S$ there are: $|S \cap N(s)|_{Neutrosophic} > |S \cap (V \setminus N(s))|_{Neutrosophic} + \delta$; and $|S \cap N(s)|_{Neutrosophic} < |S \cap (V \setminus N(s))|_{Neutrosophic} + \delta$. The first Expression, holds if S is a Neutrosophic $\delta-$SuperHyperOffensive. And the second Expression, holds if S is a Neutrosophic $\delta-$SuperHyperDefensive It's useful to define a "Neutrosophic" version of a SuperHyperConnectivities . Since there's more ways to get type-results to make a SuperHyperConnectivities more understandable. For the sake of having Neutrosophic SuperHyperConnectivities, there's a need to "redefine" the notion of a "SuperHyperConnectivities ". The SuperHyperVertices and the SuperHyperEdges are assigned by the labels from the letters of the alphabets. In this procedure, there's the usage of the position of labels to assign to the values. Assume a SuperHyperConnectivities . It's redefined a Neutrosophic SuperHyperConnectivities if the mentioned Table holds, concerning, "The Values of Vertices, SuperVertices, Edges, HyperEdges, and SuperHyperEdges Belong to The Neutrosophic SuperHyperGraph" with the key points, "The Values of The Vertices & The Number of Position in Alphabet", "The Values of The SuperVertices&The maximum Values of Its Vertices", "The Values of The Edges&The maximum Values of Its Vertices", "The Values of The HyperEdges&The maximum Values of Its Vertices", "The Values of The SuperHyperEdges&The maximum Values of Its Endpoints". To get structural examples and instances, I'm going to introduce the next SuperHyperClass of SuperHyperGraph based on a SuperHyperConnectivities . It's the main. It'll be disciplinary to have the foundation of previous definition in the kind of SuperHyperClass. If there's a need to have all SuperHyperConnectivities until the SuperHyperConnectivities, then it's officially called a "SuperHyperConnectivities" but otherwise, it isn't a SuperHyperConnectivities . There are some instances about the clarifications for the main definition titled a "SuperHyperConnectivities ". These two examples get more scrutiny and discernment since there are characterized in the disciplinary ways of the SuperHyperClass based on a SuperHyperConnectivities . For the sake of having a Neutrosophic SuperHyperConnectivities, there's a need to "redefine" the notion of a "Neutrosophic SuperHyperConnectivities" and a "Neutrosophic SuperHyperConnectivities ". The SuperHyperVertices and the SuperHyperEdges are assigned by the labels from the letters of the alphabets. In this procedure, there's the usage of the position of labels to assign to the values. Assume a Neutrosophic SuperHyperGraph. It's redefined "Neutrosophic SuperHyperGraph" if the intended Table holds. And a SuperHyperConnectivities are redefined to a "Neutrosophic SuperHyperConnectivities" if the intended Table holds. It's useful to define "Neutrosophic" version of SuperHyperClasses. Since there's more ways to get Neutrosophic type-results to make a Neutrosophic SuperHyperConnectivities more understandable. Assume a Neutrosophic SuperHyperGraph. There are some Neutrosophic SuperHyperClasses if the intended Table holds. Thus SuperHyperPath, SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultiPartite, and SuperHyperWheel, are "Neutrosophic SuperHyperPath", "Neutrosophic SuperHyperConnectivities", "Neutrosophic SuperHyperStar", "Neutrosophic SuperHyperBipartite", "Neutrosophic SuperHyperMultiPartite", and "Neutrosophic SuperHyperWheel" if the intended Table holds. A SuperHyperGraph has a "Neutrosophic SuperHyperConnectivities" where it's the strongest [the maximum Neutrosophic value from all the SuperHyperConnectivities amid the maximum value amid all SuperHyperVertices from a SuperHyperConnectivities .] SuperHyperConnectivities . A graph is a SuperHyperUniform if it's a SuperHyperGraph and the number of elements of SuperHyperEdges are the same. Assume a Neutrosophic SuperHyperGraph. There are some SuperHyperClasses as follows. It's SuperHyperPath if it's only one SuperVertex as intersection amid two given SuperHyperEdges with two exceptions; it's SuperHyperConnectivities if it's only one SuperVertex as intersection amid two given SuperHyperEdges; it's SuperHyperStar it's only one SuperVertex as intersection amid all SuperHyperEdges; it's SuperHyperBipartite it's only one SuperVertex as intersection amid two given SuperHyperEdges and these SuperVertices, forming two separate sets, has no SuperHyperEdge in common; it's SuperHyperMultiPartite it's only one SuperVertex as intersection amid two given SuperHyperEdges and these SuperVertices, forming multi separate sets, has no SuperHyperEdge in common; it's a SuperHyperWheel if it's only one SuperVertex as intersection amid two given SuperHyperEdges and one SuperVertex has one SuperHyperEdge with any common SuperVertex. The SuperHyperModel proposes the specific designs and the specific architectures. The SuperHyperModel is officially called "SuperHyperGraph" and "Neutrosophic SuperHyperGraph". In this SuperHyperModel, The "specific" cells and "specific group" of cells are SuperHyperModeled as "SuperHyperVertices" and the common and intended properties between "specific" cells and "specific group" of cells are SuperHyperModeled as "SuperHyperEdges". Sometimes, it's useful to have some degrees of determinacy, indeterminacy, and neutrality to have more precise SuperHyperModel which in this case the SuperHyperModel is called "Neutrosophic". In the future research, the foundation will be based on the "Cancer's Recognition" and the results and the definitions will be introduced in redeemed ways. The recognition of the cancer in the long-term function. The specific region has been assigned by the model [it's called SuperHyperGraph] and the long cycle of the move from the cancer is identified by this research. Sometimes the move of the cancer hasn't be easily identified since there are some determinacy, indeterminacy and neutrality about the moves and the effects of the cancer on that region; this event leads us to choose another model [it's said to be Neutrosophic SuperHyperGraph] to have convenient perception on what's happened and what's done. There are some specific models, which are well-known and they've got the names, and some SuperHyperGeneral SuperHyperModels. The moves and the traces of the cancer on the complex tracks and between complicated groups of cells could be fantasized by a Neutrosophic SuperHyperPath(-/SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultipartite, SuperHyperWheel). The aim is to find either the longest SuperHyperConnectivities or the strongest SuperHyperConnectivities in those Neutrosophic SuperHyperModels. For the longest SuperHyperConnectivities, called SuperHyperConnectivities, and the strongest SuperHyperConnectivities, called Neutrosophic SuperHyperConnectivities, some general results are introduced. Beyond that in SuperHyperStar, all possible SuperHyperPaths have only two SuperHyperEdges but it's not enough since it's essential to have at least three SuperHyperEdges to form any style of a SuperHyperConnectivities. There isn't any formation of any SuperHyperConnectivities but literarily, it's the deformation of any SuperHyperConnectivities. It, literarily, deforms and it doesn't form. A basic familiarity with SuperHyperGraph theory and Neutrosophic SuperHyperGraph theory are proposed.

Keywords: SuperHyperGraph, (Neutrosophic) SuperHyperConnectivities, Cancer's Recognition

AMS Subject Classification: 05C17, 05C22, 05E45

In the some chapters, in some researches, new setting is introduced for new SuperHyperNotion, namely, Neutrosophic SuperHyperConnectivities . Two different types of SuperHyperDefinitions are debut for them but the research goes further and the SuperHyperNotion, SuperHyperUniform, and SuperHyperClass based on that are well-defined and well-reviewed. The literature review is implemented in the whole of this research. For shining the elegancy and the significancy of this research, the comparison between this SuperHyperNotion with other SuperHyperNotions and fundamental SuperHyperNumbers are featured. The definitions are followed by the examples and the instances thus the clarifications are driven with different tools. The applications are figured out to make sense about the theoretical aspect of this ongoing research. The "Cancer's Neutrosophic Recognition" are the under research to figure out the challenges make sense about ongoing and upcoming research. The special case is up. The cells are viewed in the deemed ways. There are different types of them. Some of them are individuals and some of them are well-modeled by the group of cells. These types are all officially called "SuperHyperVertex" but the relations amid them all officially called "SuperHyperEdge". The frameworks "SuperHyperGraph" and

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The first Expression, holds if S is a "Neutrosophic $\delta-$SuperHyperOffensive". And the second Expression, holds if S is a "Neutrosophic $\delta-$SuperHyperDefensive". It's useful to define "Neutrosophic" version of SuperHyperConnectivities . Since there's more ways to get type-results to make SuperHyperConnectivities more understandable. For the sake of having Neutrosophic SuperHyperConnectivities, there's a need to "redefine" the notion of "SuperHyperConnectivities ". The SuperHyperVertices and the SuperHyperEdges are assigned by the labels from the letters of the alphabets. In this procedure, there's the usage of the position of labels to assign to the values. Assume a SuperHyperConnectivities . 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Keywords: Neutrosophic SuperHyperGraph, Neutrosophic SuperHyperConnectivities, Cancer's

Neutrosophic Recognition

AMS Subject Classification: 05C17, 05C22, 05E45

The following references are cited by chapters.

[Ref137] Henry Garrett, "*New Ideas On Super Disruptions In Cancer's Extreme Recognition As Neutrosophic SuperHyperGraph By Hyper Plans Called SuperHyperConnectivities*", ResearchGate 2023, (doi: 10.13140/RG.2.2.29441.94562).

[Ref136] Henry Garrett, "*Cancer's Neutrosophic Recognition As Neutrosophic SuperHyperGraph By SuperHyperConnectivities As Hyper Diagnosis On Super Mechanism*", ResearchGate 2023, (doi: 10.13140/RG.2.2.17252.24968).

The links to the contributions of this research book are listed below. Article #137

New Ideas On Super Disruptions In Cancer's Extreme Recognition As Neutrosophic SuperHyperGraph By Hyper Plans Called SuperHyperConnectivities

@WordPress: -

@ResearchGate: https://www.researchgate.net/publication/368275564

@Scribd: https://www.scribd.com/document/623818360

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Cancer's Neutrosophic Recognition As Neutrosophic SuperHyperGraph By SuperHyperConnectivities As Hyper Diagnosis On Super Mechanism

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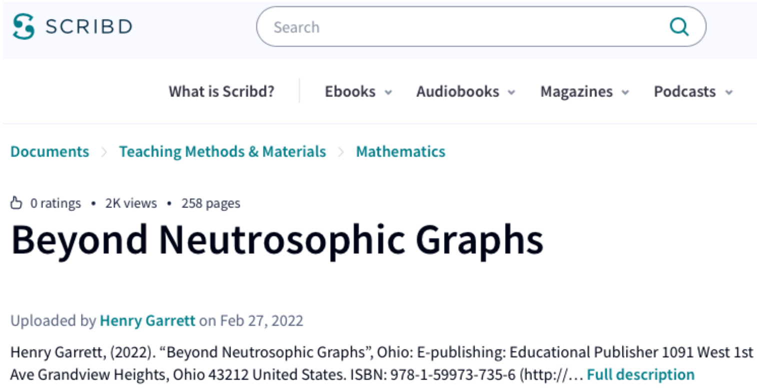

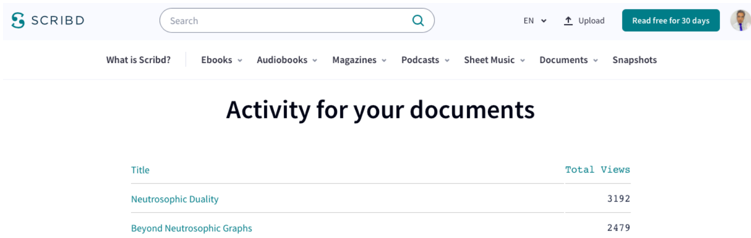

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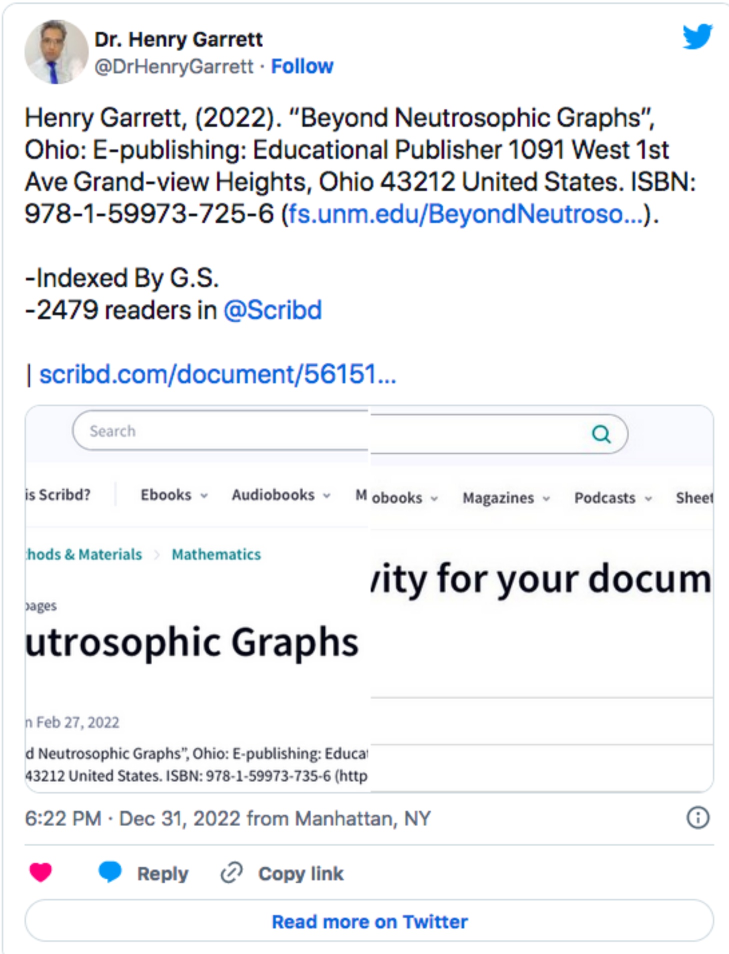
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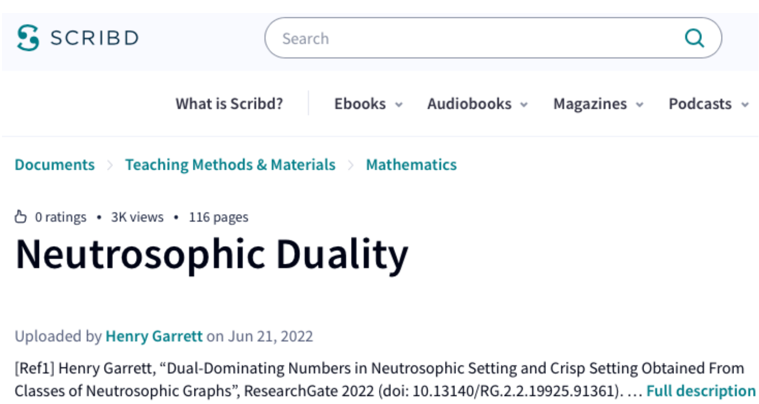
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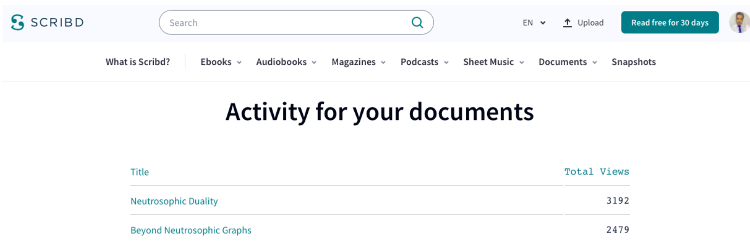
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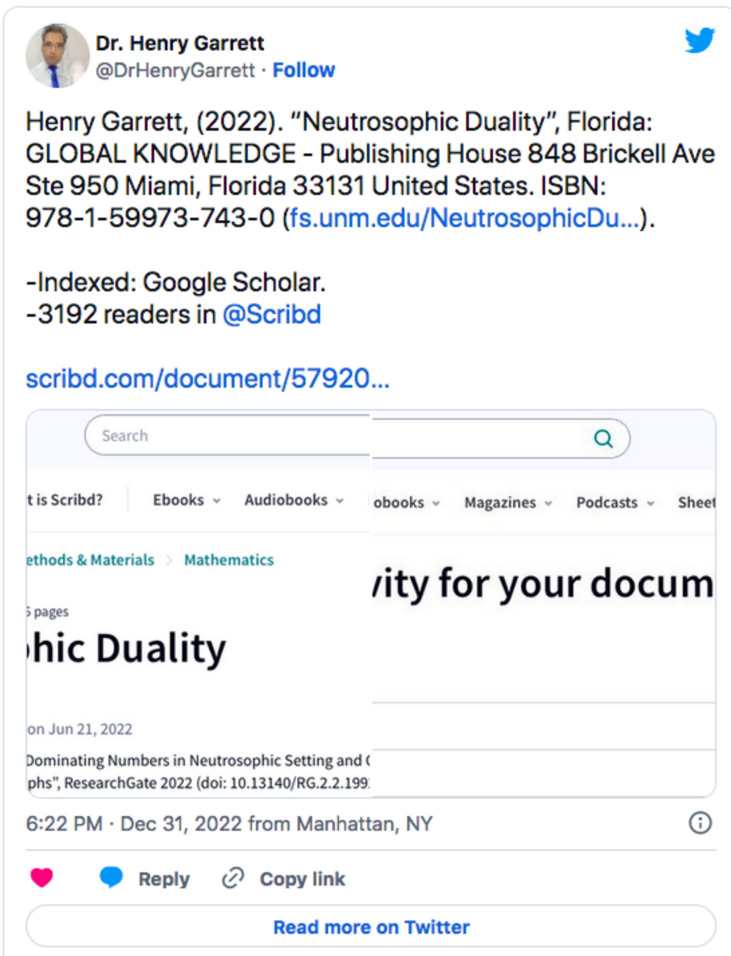
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Background

There are some researches covering the topic of this research. In what follows, there are some discussion and literature reviews about them.
First article is titled “properties of SuperHyperGraph and neutrosophic SuperHyperGraph” in **Ref.** [**HG1**] by Henry Garrett (2022). It’s first step toward the research on neutrosophic SuperHyperGraphs. This research article is published on the journal “Neutrosophic Sets and Systems” in issue 49 and the pages 531-561. In this research article, different types of notions like dominating, resolving, coloring, Eulerian(Hamiltonian) neutrosophic path, n-Eulerian(Hamiltonian) neutrosophic path, zero forcing number, zero forcing neutrosophic- number, independent number, independent neutrosophic-number, clique number, clique neutrosophic-number, matching number, matching neutrosophic-number, girth, neutrosophic girth, 1-zero-forcing number, 1-zero- forcing neutrosophic-number, failed 1-zero-forcing number, failed 1-zero-forcing neutrosophic-number, global-offensive alliance, t-offensive alliance, t-defensive alliance, t-powerful alliance, and global-powerful alliance are defined in SuperHyperGraph and neutrosophic SuperHyperGraph. Some Classes of SuperHyperGraph and Neutrosophic SuperHyperGraph are cases of research. Some results are applied in family of SuperHyperGraph and neutrosophic SuperHyperGraph. Thus this research article has concentrated on the vast notions and introducing the majority of notions.
The seminal paper and groundbreaking article is titled “neutrosophic co-degree and neutrosophic degree alongside chromatic numbers in the setting of some classes related to neutrosophic hypergraphs” in **Ref.** [**HG2**] by Henry Garrett (2022). In this research article, a novel approach is implemented on SuperHyperGraph and neutrosophic SuperHyperGraph based on general forms without using neutrosophic classes of neutrosophic SuperHyperGraph. It’s published in prestigious and fancy journal is entitled “Journal of Current Trends in Computer Science Research (JCTCSR)” with abbreviation “J Curr Trends Comp Sci Res” in volume 1 and issue 1 with pages 06-14. The research article studies deeply with choosing neutrosophic hypergraphs instead of neutrosophic SuperHyperGraph. It’s the breakthrough toward independent results based on initial background.
The seminal paper and groundbreaking article is titled “Super Hyper Dominating and Super Hyper Resolving on Neutrosophic Super Hyper Graphs and Their Directions in Game Theory and Neutrosophic Super Hyper Classes” in **Ref.** [**HG3**] by Henry Garrett (2022). In this research article, a novel approach is implemented on SuperHyperGraph and neutrosophic SuperHyperGraph based on fundamental SuperHyperNumber and using neutrosophic SuperHyperClasses of neutrosophic SuperHyperGraph. It’s published in prestigious and fancy journal is entitled “Journal of Mathematical Techniques and Computational Mathematics(JMTCM)” with abbreviation “J Math Techniques Comput Math” in volume 1 and issue 3 with pages 242-263. The research article studies deeply with choosing directly neutrosophic SuperHyperGraph and SuperHyperGraph. It’s the breakthrough toward independent results based on initial background and fundamental SuperHyperNumbers.
In some articles are titled “0039 | Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph” in **Ref.** [**HG4**] by Henry Garrett (2022), “0049 | (Failed)1-Zero-Forcing Number in Neutrosophic Graphs” in **Ref.** [**HG5**] by Henry Garrett (2022), “Extreme SuperHyperClique as the Firm Scheme of Confrontation under Cancer’s Recognition as the Model in The Setting of (Neutrosophic) SuperHyperGraphs” in **Ref.** [**HG6**] by Henry Garrett (2022), “Uncertainty On The Act And Effect Of Cancer Alongside The Foggy Positions Of Cells Toward Neutrosophic Failed SuperHyperClique inside Neutrosophic SuperHyperGraphs Titled Cancer’s Recognition” in **Ref.** [**HG7**] by Henry Garrett (2022), “Neutrosophic Version Of Separates Groups Of Cells In Cancer’s Recognition On

Neutrosophic SuperHyperGraphs" in **Ref.** [**HG8**] by Henry Garrett (2022), "The Shift Paradigm To Classify Separately The Cells and Affected Cells Toward The Totality Under Cancer's Recognition By New Multiple Definitions On the Sets Polynomials Alongside Numbers In The (Neutrosophic) SuperHyperMatching Theory Based on SuperHyperGraph and Neutrosophic SuperHyperGraph" in **Ref.** [**HG9**] by Henry Garrett (2022), "Breaking the Continuity and Uniformity of Cancer In The Worst Case of Full Connections With Extreme Failed SuperHyperClique In Cancer's Recognition Applied in (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG10**] by Henry Garrett (2022), "Neutrosophic Failed SuperHyperStable as the Survivors on the Cancer's Neutrosophic Recognition Based on Uncertainty to All Modes in Neutrosophic SuperHyperGraphs" in **Ref.** [**HG11**] by Henry Garrett (2022), "Extremism of the Attacked Body Under the Cancer's Circumstances Where Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG12**] by Henry Garrett (2022), "(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG13**] by Henry Garrett (2022), "Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints" in **Ref.** [**HG14**] by Henry Garrett (2022), "Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond" in **Ref.** [**HG15**] by Henry Garrett (2022), "(Neutrosophic) SuperHyperStable on Cancer's Recognition by Well- SuperHyperModelled (Neutrosophic) SuperHyperGraphs " in **Ref.** [**HG16**] by Henry Garrett (2022), "Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints" in **Ref.** [**HG12**] by Henry Garrett (2022), "Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG17**] by Henry Garrett (2022), "Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints" in **Ref.** [**HG18**] by Henry Garrett (2022),"(Neutrosophic) SuperHyperModeling of Cancer's Recognitions Featuring (Neutrosophic) SuperHyperDefensive SuperHyperAlliances" in **Ref.** [**HG19**] by Henry Garrett (2022), "(Neutrosophic) SuperHyperAlliances With SuperHyperDefensive and SuperHyperOffensive Type-SuperHyperSet On (Neutrosophic) SuperHyperGraph With (Neutrosophic) SuperHyperModeling of Cancer's Recognitions And Related (Neutrosophic) SuperHyperClasses" in **Ref.** [**HG20**] by Henry Garrett (2022), "SuperHyperCycle on SuperHyperGraph and Neutrosophic SuperHyperGraph With SuperHyperModeling of Cancer's Recognitions" in **Ref.** [**HG21**] by Henry Garrett (2022), "Some SuperHyperDegrees and Co-SuperHyperDegrees on Neutrosophic SuperHyperGraphs and SuperHyperGraphs Alongside Applications in Cancer's Treatments" in **Ref.** [**HG22**] by Henry Garrett (2022), "SuperHyperDominating and SuperHyperResolving on Neutrosophic SuperHyperGraphs And Their Directions in Game Theory and Neutrosophic SuperHyperClasses" in **Ref.** [**HG23**] by Henry Garrett (2022), "SuperHyperMatching By (R-)Definitions And Polynomials To Monitor Cancer's Recognition In Neutrosophic SuperHyperGraphs" in **Ref.** [**HG24**] by Henry Garrett (2023), "The Focus on The Partitions Obtained By Parallel Moves In The Cancer's Extreme Recognition With Different Types of Extreme SuperHyperMatching Set and Polynomial on (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG25**] by Henry Garrett (2023), "Extreme Failed SuperHyperClique Decides the Failures on the Cancer's Recognition in the Perfect Connections of Cancer's Attacks By SuperHyperModels Named (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG26**] by Henry Garrett (2023), "Indeterminacy On The All Possible Connections of Cells In Front of Cancer's Attacks In The Terms of Neutrosophic Failed SuperHyperClique on Cancer's Recognition called Neutrosophic SuperHyperGraphs" in **Ref.** [**HG27**] by Henry Garrett (2023), "Perfect Directions

Toward Idealism in Cancer's Neutrosophic Recognition Forwarding Neutrosophic SuperHyperClique on Neutrosophic SuperHyperGraphs" in **Ref.** [**HG28**] by Henry Garrett (2023), "Demonstrating Complete Connections in Every Embedded Regions and Sub-Regions in the Terms of Cancer's Recognition and (Neutrosophic) SuperHyperGraphs With (Neutrosophic) SuperHyperClique" in **Ref.** [**HG29**] by Henry Garrett (2023), "Different Neutrosophic Types of Neutrosophic Regions titled neutrosophic Failed SuperHyperStable in Cancer's Neutrosophic Recognition modeled in the Form of Neutrosophic SuperHyperGraphs" in **Ref.** [**HG30**] by Henry Garrett (2023), "Using the Tool As (Neutrosophic) Failed SuperHyperStable To SuperHyperModel Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG31**] by Henry Garrett (2023), "Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints" in **Ref.** [**HG32**] by Henry Garrett (2023), "(Neutrosophic) SuperHyperStable on Cancer's Recognition by Well-SuperHyperModelled (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG33**] by Henry Garrett (2023), "Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond" in **Ref.** [**HG34**] by Henry Garrett (2022), "(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG35**] by Henry Garrett (2022), "Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG36**] by Henry Garrett (2022), "Basic Neutrosophic Notions Concerning SuperHyperDominating and Neutrosophic SuperHyperResolving in SuperHyperGraph" in **Ref.** [**HG37**] by Henry Garrett (2022), "Initial Material of Neutrosophic Preliminaries to Study Some Neutrosophic Notions Based on Neutrosophic SuperHyperEdge (NSHE) in Neutrosophic SuperHyperGraph (NSHG)" in **Ref.** [**HG38**] by Henry Garrett (2022), there are some endeavors to formalize the basic SuperHyperNotions about neutrosophic SuperHyperGraph and SuperHyperGraph.

Some studies and researches about neutrosophic graphs, are proposed as book in **Ref.** [**HG39**] by Henry Garrett (2022) which is indexed by Google Scholar and has more than 2732 readers in Scribd. It's titled "Beyond Neutrosophic Graphs" and published by Ohio: E-publishing: Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United State. This research book covers different types of notions and settings in neutrosophic graph theory and neutrosophic SuperHyperGraph theory.

Also, some studies and researches about neutrosophic graphs, are proposed as book in **Ref.** [**HG40**] by Henry Garrett (2022) which is indexed by Google Scholar and has more than 3504 readers in Scribd. It's titled "Neutrosophic Duality" and published by Florida: GLOBAL KNOWLEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. This research book presents different types of notions SuperHyperResolving and SuperHyperDominating in the setting of duality in neutrosophic graph theory and neutrosophic SuperHyperGraph theory. This research book has scrutiny on the complement of the intended set and the intended set, simultaneously. It's smart to consider a set but acting on its complement that what's done in this research book which is popular in the terms of high readers in Scribd.


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Bibliography

[1] Henry Garrett, "*Properties of SuperHyperGraph and Neutrosophic SuperHyperGraph*", Neutrosophic Sets and Systems 49 (2022) 531-561 (doi: 10.5281/zenodo.6456413). (http://fs.unm.edu/NSS/NeutrosophicSuperHyperGraph34.pdf). (https://digitalrepository.unm.edu/nss_journal/vol49/iss1/34).

[2] Henry Garrett, "*Neutrosophic Co-degree and Neutrosophic Degree alongside Chromatic Numbers in the Setting of Some Classes Related to Neutrosophic Hypergraphs*", J Curr Trends Comp Sci Res 1(1) (2022) 06-14.

[3] Henry Garrett, "*Super Hyper Dominating and Super Hyper Resolving on Neutrosophic Super Hyper Graphs and Their Directions in Game Theory and Neutrosophic Super Hyper Classes*", J Math Techniques Comput Math 1(3) (2022) 242-263.

[4] Garrett, Henry. "*0039 | Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph.*" CERN European Organization for Nuclear Research - Zenodo, Nov. 2022. CERN European Organization for Nuclear Research, https://doi.org/10.5281/zenodo.6319942. https://oa.mg/work/10.5281/zenodo.6319942

[5] Garrett, Henry. "*0049 | (Failed)1-Zero-Forcing Number in Neutrosophic Graphs.*" CERN European Organization for Nuclear Research - Zenodo, Feb. 2022. CERN European Organization for Nuclear Research, https://doi.org/10.13140/rg.2.2.35241.26724. https://oa.mg/work/10.13140/rg.2.2.35241.26724

[6] Henry Garrett, "*Extreme SuperHyperClique as the Firm Scheme of Confrontation under Cancer's Recognition as the Model in The Setting of (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010308 (doi: 10.20944/preprints202301.0308.v1).

[7] Henry Garrett, "*Uncertainty On The Act And Effect Of Cancer Alongside The Foggy Positions Of Cells Toward Neutrosophic Failed SuperHyperClique inside Neutrosophic SuperHyperGraphs Titled Cancer's Recognition*", Preprints 2023, 2023010282 (doi: 10.20944/preprints202301.0282.v1).

[8] Henry Garrett, "*Neutrosophic Version Of Separates Groups Of Cells In Cancer's Recognition On Neutrosophic SuperHyperGraphs*", Preprints 2023, 2023010267 (doi: 10.20944/preprints202301.0267.v1).

[9] Henry Garrett, "*The Shift Paradigm To Classify Separately The Cells and Affected Cells Toward The Totality Under Cancer's Recognition By New Multiple Definitions On the Sets Polynomials Alongside Numbers In The (Neutrosophic) SuperHyperMatching Theory Based on SuperHyperGraph and Neutrosophic SuperHyperGraph*", Preprints 2023, 2023010265 (doi: 10.20944/preprints202301.0265.v1).

[10] Henry Garrett, "*Breaking the Continuity and Uniformity of Cancer In The Worst Case of Full Connections With Extreme Failed SuperHyperClique In Cancer's Recognition Applied in (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010262,(doi: 10.20944/preprints202301.0262.v1).

[11] Henry Garrett, "*Neutrosophic Failed SuperHyperStable as the Survivors on the Cancer's Neutrosophic Recognition Based on Uncertainty to All Modes in Neutrosophic SuperHyperGraphs*", Preprints 2023, 2023010240 (doi: 10.20944/preprints202301.0240.v1).

[12] Henry Garrett, "*Extremism of the Attacked Body Under the Cancer's Circumstances Where Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010224, (doi: 10.20944/preprints202301.0224.v1).

[13] Henry Garrett, "*(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010105 (doi: 10.20944/preprints202301.0105.v1).

[14] Henry Garrett, "*Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints*", Preprints 2023, 2023010088 (doi: 10.20944/preprints202301.0088.v1).

[15] Henry Garrett, "*Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond*", Preprints 2023, 2023010044

[16] Henry Garrett, "*(Neutrosophic) SuperHyperStable on Cancer's Recognition by Well- SuperHyperModelled (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010043 (doi: 10.20944/preprints202301.0043.v1).

[17] Henry Garrett, *"Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs"*, Preprints 2023, 2023010105 (doi: 10.20944/preprints202301.0105.v1).

[18] Henry Garrett, *"Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints"*, Preprints 2023, 2023010088 (doi: 10.20944/preprints202301.0088.v1).

[19] Henry Garrett, *"(Neutrosophic) SuperHyperModeling of Cancer's Recognitions Featuring (Neutrosophic) SuperHyperDefensive SuperHyperAlliances"*, Preprints 2022, 2022120549 (doi: 10.20944/preprints202212.0549.v1).

[20] Henry Garrett, "*(Neutrosophic) SuperHyperAlliances With SuperHyperDefensive and SuperHyperOffensive Type-SuperHyperSet On (Neutrosophic) SuperHyperGraph With (Neutrosophic) SuperHyperModeling of Cancer's Recognitions And Related (Neutrosophic) SuperHyperClasses*", Preprints 2022, 2022120540 (doi: 10.20944/preprints202212.0540.v1).

[21] Henry Garrett, "*SuperHyperCycle on SuperHyperGraph and Neutrosophic SuperHyperGraph With SuperHyperModeling of Cancer's Recognitions*", Preprints 2022, 2022120500 (doi: 10.20944/preprints202212.0500.v1).

[22] Henry Garrett, "*Some SuperHyperDegrees and Co-SuperHyperDegrees on Neutrosophic SuperHyperGraphs and SuperHyperGraphs Alongside Applications in Cancer's Treatments*", Preprints 2022, 2022120324 (doi: 10.20944/preprints202212.0324.v1).

[23] Henry Garrett, "*SuperHyperDominating and SuperHyperResolving on Neutrosophic SuperHyperGraphs And Their Directions in Game Theory and Neutrosophic SuperHyperClasses*", Preprints 2022, 2022110576 (doi: 10.20944/preprints202211.0576.v1).

[24] Henry Garrett,"*SuperHyperMatching By (R-)Definitions And Polynomials To Monitor Cancer's Recognition In Neutrosophic SuperHyperGraphs*", ResearchGate 2023,(doi: 10.13140/RG.2.2.35061.65767).

[25] Henry Garrett,"*The Focus on The Partitions Obtained By Parallel Moves In The Cancer's Extreme Recognition With Different Types of Extreme SuperHyperMatching Set and Polynomial on (Neutrosophic) SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.18494.15680).

[26] Henry Garrett,"*Extreme Failed SuperHyperClique Decides the Failures on the Cancer's Recognition in the Perfect Connections of Cancer's Attacks By SuperHyperModels Named (Neutrosophic) SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.32530.73922).

[27] Henry Garrett,"*Indeterminacy On The All Possible Connections of Cells In Front of Cancer's Attacks In The Terms of Neutrosophic Failed SuperHyperClique on Cancer's Recognition called Neutrosophic SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.15897.70243).

[28] Henry Garrett,"*Perfect Directions Toward Idealism in Cancer's Neutrosophic Recognition Forwarding Neutrosophic SuperHyperClique on Neutrosophic SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.30092.80004).

[29] Henry Garrett,"*Demonstrating Complete Connections in Every Embedded Regions and Sub-Regions in the Terms of Cancer's Recognition and (Neutrosophic) SuperHyperGraphs With (Neutrosophic) SuperHyperClique*", ResearchGate 2023, (doi: 10.13140/RG.2.2.23172.19849).

[30] Henry Garrett,"*Different Neutrosophic Types of Neutrosophic Regions titled neutrosophic Failed SuperHyperStable in Cancer's Neutrosophic Recognition modeled in the Form of Neutrosophic SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.17385.36968).

[31] Henry Garrett, "*Using the Tool As (Neutrosophic) Failed SuperHyperStable To SuperHyperModel Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.28945.92007).

[32] Henry Garrett, "*Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints*", ResearchGate 2023, (doi: 10.13140/RG.2.2.11447.80803).

[33] Henry Garrett, "*(Neutrosophic) SuperHyperStable on Cancer's Recognition by Well-SuperHyperModelled (Neutrosophic) SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.35774.77123).

[34] Henry Garrett, "*Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond*", ResearchGate 2022, (doi: 10.13140/RG.2.2.36141.77287).

[35] Henry Garrett, "*(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs*", ResearchGate 2022, (doi: 10.13140/RG.2.2.29430.88642).

[36] Henry Garrett, "*Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs*", ResearchGate 2022, (doi: 10.13140/RG.2.2.11369.16487).

[37] Henry Garrett, *"Basic Neutrosophic Notions Concerning SuperHyperDominating and Neutrosophic SuperHyperResolving in SuperHyperGraph"*, ResearchGate 2022 (doi: 10.13140/RG.2.2.29173.86244).

[38] Henry Garrett, "*Initial Material of Neutrosophic Preliminaries to Study Some Neutrosophic Notions Based on Neutrosophic SuperHyperEdge (NSHE) in Neutrosophic SuperHyperGraph (NSHG)*", ResearchGate 2022 (doi: 10.13140/RG.2.2.25385.88160).

[39] Henry Garrett, (2022). "*Beyond Neutrosophic Graphs*", Ohio: E-publishing: Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United States. ISBN: 979-1-59973-725-6 (http://fs.unm.edu/BeyondNeutrosophicGraphs.pdf).

[40] Henry Garrett, (2022). "*Neutrosophic Duality*", Florida: GLOBAL KNOWLEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. ISBN: 978-1-59973-743-0 (http://fs.unm.edu/NeutrosophicDuality.pdf).

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CHAPTER 2

Acknowledgements

The author is going to express his gratitude and his appreciation about the brains and their hands which are showing the importance of words in the framework of every wisdom, knowledge, arts, and emotions which are streaming in the lines from the words, notions, ideas and approaches to have the material and the contents which are only the way to flourish the minds, to grow the notions, to advance the ways and to make the stable ways to be amid events and storms of minds for surviving from them and making the outstanding experiences about the tools and the ideas to be on the star lines of words and shining like stars, forever.

CHAPTER 3

Extreme SuperHyperConnectivities

The following sections are cited as follows, which is my 135th manuscript and I use prefix 135 as number before any labelling for items.

[**Ref137**] Henry Garrett, "*New Ideas On Super Disruptions In Cancer's Extreme Recognition As Neutrosophic SuperHyperGraph By Hyper Plans Called SuperHyperConnectivities*", ResearchGate 2023, (doi: 10.13140/RG.2.2.29441.94562).

The links to the contributions of this research book are listed below. Article #137

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DOI: 10.13140/RG.2.2.29441.94562

Print length: 273 pages
Project: Neutrosophic SuperHyperGraphs and SuperHyperGraphs
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CHAPTER 4

New Ideas On Super Disruptions In Cancer's Extreme Recognition As Neutrosophic SuperHyperGraph By Hyper Plans Called SuperHyperConnectivities

ABSTRACT

In this research, [Extreme Strength of the Extreme SuperHyperPaths] Assume a Neutrosophic SuperHyperGraph (NSHG) S is an ordered pair $S = (V, E)$. an Extreme SuperHyperPath (NSHP) from Extreme SuperHyperVertex (NSHV) V_1 to Extreme SuperHyperVertex (NSHV) V_s is sequence of Extreme SuperHyperVertices (NSHV) and Extreme SuperHyperEdges (NSHE) $V_1, E_1, V_2, E_2, V_3, \ldots, V_{s-1}, E_{s-1}, V_s$, have Extreme t-strength $(\min\{T(V_i)\}, m, n)_{i=1}^s$; Extreme i-strength $(m, \min\{I(V_i)\}, n)_{i=1}^s$; Extreme f-strength $(m, n, \min\{F(V_i)\})_{i=1}^s$; Extreme strength $(\min\{T(V_i)\}, \min\{I(V_i)\}, \min\{F(V_i)\})_{i=1}^s$. [Different Extreme Types of Extreme SuperHyperEdges (NSHE)] Assume a Neutrosophic SuperHyperGraph (NSHG) S is an ordered pair $S = (V, E)$. Consider an Extreme SuperHyperEdge (NSHE) $E = \{V_1, V_2, \ldots, V_s\}$. Then E is called Extreme t-connective if $T(E) \geq$ maximum number of Extreme t-strength of SuperHyperPath (NSHP) from Extreme SuperHyperVertex (NSHV) V_i to Extreme SuperHyperVertex (NSHV) V_j where $1 \leq i, j \leq s$; Extreme i-connective if $I(E) \geq$ maximum number of Extreme i-strength of SuperHyperPath (NSHP) from Extreme SuperHyperVertex (NSHV) V_i to Extreme SuperHyperVertex (NSHV) V_j where $1 \leq i, j \leq s$; Extreme f-connective if $F(E) \geq$ maximum number of Extreme f-strength of SuperHyperPath (NSHP) from Extreme SuperHyperVertex (NSHV) V_i to Extreme SuperHyperVertex (NSHV) V_j where $1 \leq i, j \leq s$; Extreme connective if $(T(E), I(E), F(E)) \geq$ maximum number of Extreme strength of SuperHyperPath (NSHP) from Extreme SuperHyperVertex (NSHV) V_i to Extreme SuperHyperVertex (NSHV) V_j where $1 \leq i, j \leq s$. ((Extreme) SuperHyperConnectivities). Assume a Neutrosophic SuperHyperGraph (NSHG) S is an ordered pair $S = (V, E)$. Consider an Extreme SuperHyperEdge (NSHE) $E = \{V_1, V_2, \ldots, V_s\}$. Then E is called an Extreme SuperHyperConnectivities if it's either of Extreme t-connective, Extreme i-connective, Extreme f-connective, and Extreme connective and $\mathcal{C}(NSHG)$ for an Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of high Extreme cardinality of the Extreme SuperHyperEdges in the consecutive Extreme sequence of Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; an Extreme SuperHyperConnectivities if it's either of Extreme t-connective, Extreme i-connective, Extreme f-connective, and Extreme connective and $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Extreme cardinality of the Extreme SuperHyperEdges of an Extreme SuperHyperSet S of high Extreme cardinality consecutive Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; an Extreme SuperHyperConnectivities SuperHyperPolynomial if it's either of Extreme t-connective, Extreme i-connective, Extreme f-connective, and Extreme connective and $\mathcal{C}(NSHG)$ for an Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the

Extreme coefficients defined as the Extreme number of the maximum Extreme cardinality of the Extreme SuperHyperEdges of an Extreme SuperHyperSet S of high Extreme cardinality consecutive Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; and the Extreme power is corresponded to its Extreme coefficient; an Extreme SuperHyperConnectivities SuperHyperPolynomial if it's either of Extreme t-connective, Extreme i-connective, Extreme f-connective, and Extreme connective and $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the Extreme coefficients defined as the Extreme number of the maximum Extreme cardinality of the Extreme SuperHyperEdges of an Extreme SuperHyperSet S of high Extreme cardinality consecutive Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; and the Extreme power is corresponded to its Extreme coefficient; an Extreme R-SuperHyperConnectivities if it's either of Extreme t-connective, Extreme i-connective, Extreme f-connective, and Extreme connective and $\mathcal{C}(NSHG)$ for an Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of high Extreme cardinality of the Extreme SuperHyperVertices in the consecutive Extreme sequence of Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; an Extreme R-SuperHyperConnectivities if it's either of Extreme t-connective, Extreme i-connective, Extreme f-connective, and Extreme connective and $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Extreme cardinality of the Extreme SuperHyperVertices of an Extreme SuperHyperSet S of high Extreme cardinality consecutive Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; an Extreme R-SuperHyperConnectivities SuperHyperPolynomial if it's either of Extreme t-connective, Extreme i-connective, Extreme f-connective, and Extreme connective and $\mathcal{C}(NSHG)$ for an Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the Extreme coefficients defined as the Extreme number of the maximum Extreme cardinality of the Extreme SuperHyperVertices of an Extreme SuperHyperSet S of high Extreme cardinality consecutive Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; and the Extreme power is corresponded to its Extreme coefficient; an Extreme SuperHyperConnectivities SuperHyperPolynomial if it's either of Extreme t-connective, Extreme i-connective, Extreme f-connective, and Extreme connective and $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the Extreme coefficients defined as the Extreme number of the maximum Extreme cardinality of the Extreme SuperHyperVertices of an Extreme SuperHyperSet S of high Extreme cardinality consecutive Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; and the Extreme power is corresponded to its Extreme coefficient. In this research, new setting is introduced for new SuperHyperNotions, namely, a SuperHyperConnectivities and Extreme SuperHyperConnectivities. Two different types of SuperHyperDefinitions are debut for them but the research goes further and the SuperHyperNotion, SuperHyperUniform, and SuperHyperClass based on that are well-defined and well-reviewed. The literature review is implemented in the whole of this research. For shining the elegancy and the significancy of this research, the comparison between this SuperHyperNotion with other SuperHyperNotions and fundamental SuperHyperNumbers are featured. The definitions are followed by the examples and the instances thus the clarifications are driven with different tools. The applications are figured out to make sense about the theoretical aspect of this ongoing research. The "Cancer's Recognition" are the under research to figure out the challenges make sense about ongoing and upcoming research. The special case is up. The cells are viewed in the deemed ways. There are different types of them. Some of them are individuals and some of them are well-modeled by the group of cells. These types are all officially called "SuperHyperVertex" but the relations amid them all officially called "SuperHyperEdge". The frameworks "SuperHyperGraph" and "Neutrosophic SuperHyperGraph" are chosen and elected to research about "Cancer's Recognition". Thus these complex and dense SuperHyperModels open up some avenues to research on theoretical segments and "Cancer's Recognition". Some avenues are posed to pursue this research. It's also officially collected in the form of some questions and some problems. Assume a SuperHyperGraph. Then an Extreme SuperHyperConnectivities $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum cardinality of a SuperHyperSet S of high cardinality SuperHyperEdges such that there's no SuperHyperVertex not to in a SuperHyperEdge and there's no SuperHyperEdge to have a SuperHyperVertex in a SuperHyperEdge; an Extreme SuperHyperConnectivities $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of high Extreme cardinality Extreme SuperHyperEdges such that there's no Extreme SuperHyperVertex not to in an Extreme SuperHyperEdge and there's no Extreme SuperHyperEdge to have an Extreme SuperHyperVertex in an Extreme SuperHyperEdge; an Extreme SuperHyperConnectivities SuperHyperPolynomial $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the coefficients defined as the number of the maximum cardinality of a SuperHyperSet S of high cardinality SuperHyperEdges such that there's no SuperHyperVertex not to in a SuperHyperEdge and there's no SuperHyperEdge to have a SuperHyperVertex in a SuperHyperEdge and the power is corresponded to its coefficient; an Extreme SuperHyperConnectivities SuperHyperPolynomial $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the Extreme coefficients defined as the Extreme number of the maximum Extreme cardinality of an Extreme SuperHyperSet S of high Extreme cardinality Extreme SuperHyperEdges such that there's no Extreme SuperHyperVertex not to in an Extreme SuperHyperEdge and there's no Extreme SuperHyperEdge to have an Extreme SuperHyperVertex in an Extreme SuperHyperEdge and the Extreme power is Extremely corresponded to its Extreme coefficient; an Extreme R-SuperHyperConnectivities $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum cardinality of a SuperHyperSet S of high cardinality SuperHyperVertices such that there's no SuperHyperVertex not to in a SuperHyperEdge and there's no SuperHyperEdge to have a SuperHyperVertex in a SuperHyperEdge; an Extreme R-SuperHyperConnectivities $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of high Extreme cardinality Extreme SuperHyperVertices such that there's no Extreme SuperHyperVertex not to in an Extreme SuperHyperEdge and there's no Extreme SuperHyperEdge to have an Extreme SuperHyperVertex in an Extreme SuperHyperEdge; an Extreme R-SuperHyperConnectivities SuperHyperPolynomial $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the coefficients defined as the number of the maximum cardinality of a SuperHyperSet S of high cardinality SuperHyperVertices such that there's no SuperHyperVertex not to in a SuperHyperEdge and there's no SuperHyperEdge to have a SuperHyperVertex in a SuperHyperEdge and the power is corresponded to its coefficient; an Extreme R-SuperHyperConnectivities SuperHyperPolynomial $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the Extreme coefficients defined as the Extreme number of the maximum Extreme cardinality of an Extreme SuperHyperSet S of high Extreme cardinality Extreme SuperHyperVertices such that there's no Extreme SuperHyperVertex not to in an Extreme SuperHyperEdge and there's no Extreme SuperHyperEdge to have an Extreme SuperHyperVertex in an Extreme SuperHyperEdge and the Extreme power is Extremely corresponded to its Extreme coefficient. Assume a SuperHyperGraph. Then $\delta-$SuperHyperConnectivities is a maximal of SuperHyperVertices with a maximum cardinality such that either of the following expressions hold for the (Extreme) cardinalities of SuperHyperNeighbors of $s \in S$: there are $|S \cap N(s)| > |S \cap (V \setminus N(s))| + \delta$; and $|S \cap N(s)| < |S \cap (V \setminus N(s))| + \delta$. The first Expression, holds if S is an $\delta-$SuperHyperOffensive. And the second Expression, holds if S is an $\delta-$SuperHyperDefensive; an Extreme $\delta-$SuperHyperConnectivities is a maximal Extreme of SuperHyperVertices with maximum Extreme cardinality such that either of the following expressions hold for the Extreme cardinalities of SuperHyperNeighbors of $s \in S$ there are: $|S \cap N(s)|_{Extreme} > |S \cap (V \setminus N(s))|_{Extreme} + \delta$; and $|S \cap N(s)|_{Extreme} < |S \cap (V \setminus N(s))|_{Extreme} + \delta$. The first Expression, holds if S is an Extreme $\delta-$SuperHyperOffensive. And the second Expression, holds if S is an Extreme $\delta-$SuperHyperDefensive It's useful to define a "Extreme" version of a SuperHyperConnectivities . Since there's more ways to get type-results to make a SuperHyperConnectivities more understandable. For the sake of having Extreme SuperHyperConnectivities, there's a need to "redefine" the notion of a "SuperHyperConnectivities ". The SuperHyperVertices and the SuperHyperEdges are assigned by the labels from the letters of the alphabets. In this procedure, there's the usage of the position of labels to assign to the values. Assume a SuperHyperConnectivities . It's redefined an Extreme SuperHyperConnectivities if the mentioned Table holds, concerning, "The Values of Vertices, SuperVertices, Edges, HyperEdges, and SuperHyperEdges Belong to The Neutrosophic SuperHyperGraph" with the key points, "The Values of The Vertices & The Number of Position in Alphabet", "The Values of The SuperVertices&The maximum Values of Its Vertices", "The Values of The Edges&The maximum Values of Its Vertices", "The Values of The HyperEdges&The maximum Values of Its Vertices", "The Values of The SuperHyperEdges&The maximum Values of Its Endpoints". To get structural examples and instances, I'm going to introduce the next SuperHyperClass of SuperHyperGraph based on a SuperHyperConnectivities . It's the main. It'll be disciplinary to have the foundation of previous definition in the kind of SuperHyperClass. If there's a need to have all SuperHyperConnectivities until the SuperHyperConnectivities, then it's officially called a "SuperHyperConnectivities" but otherwise, it isn't a SuperHyperConnectivities . There are some instances about the clarifications for the main definition titled a "SuperHyperConnectivities ". These two examples get more scrutiny and discernment since there are characterized in the disciplinary ways of the SuperHyperClass based on a SuperHyperConnectivities . For the sake of having an Extreme SuperHyperConnectivities, there's a need to "redefine" the notion of a "Extreme SuperHyperConnectivities" and a "Extreme SuperHyperConnectivities ". The SuperHyperVertices and the SuperHyperEdges are assigned by the labels from the letters of the alphabets. In this procedure, there's the usage of the position of labels to assign to the values. Assume a Neutrosophic SuperHyperGraph. It's redefined "Neutrosophic SuperHyperGraph" if the intended Table holds. And a SuperHyperConnectivities are redefined to a "Extreme SuperHyperConnectivities" if the intended Table holds. It's useful to define "Extreme" version of SuperHyperClasses. Since there's more ways to get Extreme type-results to make an Extreme SuperHyperConnectivities more understandable. Assume a Neutrosophic SuperHyperGraph. There are some Extreme SuperHyperClasses if the intended Table holds. Thus SuperHyperPath, SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultiPartite, and SuperHyperWheel, are "Extreme SuperHyperPath", "Extreme SuperHyperConnectivities", "Extreme SuperHyperStar", "Extreme SuperHyperBipartite", "Extreme SuperHyperMultiPartite", and "Extreme SuperHyperWheel" if the intended Table holds. A SuperHyperGraph has a "Extreme SuperHyperConnectivities" where it's the strongest [the maximum Extreme value from all the SuperHyperConnectivities amid the maximum value amid all SuperHyperVertices from a SuperHyperConnectivities .] SuperHyperConnectivities . A graph is a

SuperHyperUniform if it's a SuperHyperGraph and the number of elements of SuperHyperEdges are the same. Assume a Neutrosophic SuperHyperGraph. There are some SuperHyperClasses as follows. It's SuperHyperPath if it's only one SuperVertex as intersection amid two given SuperHyperEdges with two exceptions; it's SuperHyperConnectivities if it's only one SuperVertex as intersection amid two given SuperHyperEdges; it's SuperHyperStar it's only one SuperVertex as intersection amid all SuperHyperEdges; it's SuperHyperBipartite it's only one SuperVertex as intersection amid two given SuperHyperEdges and these SuperVertices, forming two separate sets, has no SuperHyperEdge in common; it's SuperHyperMultiPartite it's only one SuperVertex as intersection amid two given SuperHyperEdges and these SuperVertices, forming multi separate sets, has no SuperHyperEdge in common; it's a SuperHyperWheel if it's only one SuperVertex as intersection amid two given SuperHyperEdges and one SuperVertex has one SuperHyperEdge with any common SuperVertex. The SuperHyperModel proposes the specific designs and the specific architectures. The SuperHyperModel is officially called "SuperHyperGraph" and "Neutrosophic SuperHyperGraph". In this SuperHyperModel, The "specific" cells and "specific group" of cells are SuperHyperModeled as "SuperHyperVertices" and the common and intended properties between "specific" cells and "specific group" of cells are SuperHyperModeled as "SuperHyperEdges". Sometimes, it's useful to have some degrees of determinacy, indeterminacy, and neutrality to have more precise SuperHyperModel which in this case the SuperHyperModel is called "Extreme". In the future research, the foundation will be based on the "Cancer's Recognition" and the results and the definitions will be introduced in redeemed ways. The recognition of the cancer in the long-term function. The specific region has been assigned by the model [it's called SuperHyperGraph] and the long cycle of the move from the cancer is identified by this research. Sometimes the move of the cancer hasn't be easily identified since there are some determinacy, indeterminacy and neutrality about the moves and the effects of the cancer on that region; this event leads us to choose another model [it's said to be Neutrosophic SuperHyperGraph] to have convenient perception on what's happened and what's done. There are some specific models, which are well-known and they've got the names, and some SuperHyperGeneral SuperHyperModels. The moves and the traces of the cancer on the complex tracks and between complicated groups of cells could be fantasized by an Extreme SuperHyperPath(-/SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultipartite, SuperHyperWheel). The aim is to find either the longest SuperHyperConnectivities or the strongest SuperHyperConnectivities in those Extreme SuperHyperModels. For the longest SuperHyperConnectivities, called SuperHyperConnectivities, and the strongest SuperHyperConnectivities, called Extreme SuperHyperConnectivities, some general results are introduced. Beyond that in SuperHyperStar, all possible SuperHyperPaths have only two SuperHyperEdges but it's not enough since it's essential to have at least three SuperHyperEdges to form any style of a SuperHyperConnectivities. There isn't any formation of any SuperHyperConnectivities but literarily, it's the deformation of any SuperHyperConnectivities. It, literarily, deforms and it doesn't form. A basic familiarity with Extreme SuperHyperConnectivities theory, SuperHyperGraphs theory, and Neutrosophic SuperHyperGraphs theory are proposed.

Keywords: Neutrosophic SuperHyperGraph, (Extreme) SuperHyperConnectivities, Cancer's

Extreme Recognition

AMS Subject Classification: 05C17, 05C22, 05E45

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CHAPTER 5

Background

There are some researches covering the topic of this research. In what follows, there are some discussion and literature reviews about them.
First article is titled “properties of SuperHyperGraph and neutrosophic SuperHyperGraph” in **Ref.** [**HG1**] by Henry Garrett (2022). It’s first step toward the research on neutrosophic SuperHyperGraphs. This research article is published on the journal “Neutrosophic Sets and Systems” in issue 49 and the pages 531-561. In this research article, different types of notions like dominating, resolving, coloring, Eulerian(Hamiltonian) neutrosophic path, n-Eulerian(Hamiltonian) neutrosophic path, zero forcing number, zero forcing neutrosophic- number, independent number, independent neutrosophic-number, clique number, clique neutrosophic-number, matching number, matching neutrosophic-number, girth, neutrosophic girth, 1-zero-forcing number, 1-zero- forcing neutrosophic-number, failed 1-zero-forcing number, failed 1-zero-forcing neutrosophic-number, global-offensive alliance, t-offensive alliance, t-defensive alliance, t-powerful alliance, and global-powerful alliance are defined in SuperHyperGraph and neutrosophic SuperHyperGraph. Some Classes of SuperHyperGraph and Neutrosophic SuperHyperGraph are cases of research. Some results are applied in family of SuperHyperGraph and neutrosophic SuperHyperGraph. Thus this research article has concentrated on the vast notions and introducing the majority of notions.
The seminal paper and groundbreaking article is titled “neutrosophic co-degree and neutrosophic degree alongside chromatic numbers in the setting of some classes related to neutrosophic hypergraphs” in **Ref.** [**HG2**] by Henry Garrett (2022). In this research article, a novel approach is implemented on SuperHyperGraph and neutrosophic SuperHyperGraph based on general forms without using neutrosophic classes of neutrosophic SuperHyperGraph. It’s published in prestigious and fancy journal is entitled “Journal of Current Trends in Computer Science Research (JCTCSR)” with abbreviation “J Curr Trends Comp Sci Res” in volume 1 and issue 1 with pages 06-14. The research article studies deeply with choosing neutrosophic hypergraphs instead of neutrosophic SuperHyperGraph. It’s the breakthrough toward independent results based on initial background.
The seminal paper and groundbreaking article is titled “Super Hyper Dominating and Super Hyper Resolving on Neutrosophic Super Hyper Graphs and Their Directions in Game Theory and Neutrosophic Super Hyper Classes” in **Ref.** [**HG3**] by Henry Garrett (2022). In this research article, a novel approach is implemented on SuperHyperGraph and neutrosophic SuperHyperGraph based on fundamental SuperHyperNumber and using neutrosophic SuperHyperClasses of neutrosophic SuperHyperGraph. It’s published in prestigious and fancy journal is entitled “Journal of Mathematical Techniques and Computational Mathematics(JMTCM)” with abbreviation “J Math Techniques Comput Math” in volume 1 and issue 3 with pages 242-263. The research article studies deeply with

choosing directly neutrosophic SuperHyperGraph and SuperHyperGraph. It's the breakthrough toward independent results based on initial background and fundamental SuperHyperNumbers.
In some articles are titled "0039 | Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph" in **Ref.** [**HG4**] by Henry Garrett (2022), "0049 | (Failed)1-Zero-Forcing Number in Neutrosophic Graphs" in **Ref.** [**HG5**] by Henry Garrett (2022), "Extreme SuperHyperClique as the Firm Scheme of Confrontation under Cancer's Recognition as the Model in The Setting of (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG6**] by Henry Garrett (2022), "Uncertainty On The Act And Effect Of Cancer Alongside The Foggy Positions Of Cells Toward Neutrosophic Failed SuperHyperClique inside Neutrosophic SuperHyperGraphs Titled Cancer's Recognition" in **Ref.** [**HG7**] by Henry Garrett (2022), "Neutrosophic Version Of Separates Groups Of Cells In Cancer's Recognition On Neutrosophic SuperHyperGraphs" in **Ref.** [**HG8**] by Henry Garrett (2022), "The Shift Paradigm To Classify Separately The Cells and Affected Cells Toward The Totality Under Cancer's Recognition By New Multiple Definitions On the Sets Polynomials Alongside Numbers In The (Neutrosophic) SuperHyperMatching Theory Based on SuperHyperGraph and Neutrosophic SuperHyperGraph" in **Ref.** [**HG9**] by Henry Garrett (2022), "Breaking the Continuity and Uniformity of Cancer In The Worst Case of Full Connections With Extreme Failed SuperHyperClique In Cancer's Recognition Applied in (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG10**] by Henry Garrett (2022), "Neutrosophic Failed SuperHyperStable as the Survivors on the Cancer's Neutrosophic Recognition Based on Uncertainty to All Modes in Neutrosophic SuperHyperGraphs" in **Ref.** [**HG11**] by Henry Garrett (2022), "Extremism of the Attacked Body Under the Cancer's Circumstances Where Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG12**] by Henry Garrett (2022), "(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG13**] by Henry Garrett (2022), "Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints" in **Ref.** [**HG14**] by Henry Garrett (2022), "Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond" in **Ref.** [**HG15**] by Henry Garrett (2022), "(Neutrosophic) SuperHyperStable on Cancer's Recognition by Well- SuperHyperModelled (Neutrosophic) SuperHyperGraphs " in **Ref.** [**HG16**] by Henry Garrett (2022), "Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints" in **Ref.** [**HG12**] by Henry Garrett (2022), "Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG17**] by Henry Garrett (2022), "Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints" in **Ref.** [**HG18**] by Henry Garrett (2022),"(Neutrosophic) SuperHyperModeling of Cancer's Recognitions Featuring (Neutrosophic) SuperHyperDefensive SuperHyperAlliances" in **Ref.** [**HG19**] by Henry Garrett (2022), "(Neutrosophic) SuperHyperAlliances With SuperHyperDefensive and SuperHyperOffensive Type-SuperHyperSet On (Neutrosophic) SuperHyperGraph With (Neutrosophic) SuperHyperModeling of Cancer's Recognitions And Related (Neutrosophic) SuperHyperClasses" in **Ref.** [**HG20**] by Henry Garrett (2022), "SuperHyperGirth on SuperHyperGraph and Neutrosophic SuperHyperGraph With SuperHyperModeling of Cancer's Recognitions" in **Ref.** [**HG21**] by Henry Garrett (2022), "Some SuperHyperDegrees and Co-SuperHyperDegrees on Neutrosophic SuperHyperGraphs and SuperHyperGraphs Alongside Applications in Cancer's Treatments" in **Ref.** [**HG22**] by Henry Garrett (2022), "SuperHyperDominating and SuperHyperResolving on Neutrosophic SuperHyperGraphs

And Their Directions in Game Theory and Neutrosophic SuperHyperClasses" in **Ref.** [**HG23**] by Henry Garrett (2022), "SuperHyperMatching By (R-)Definitions And Polynomials To Monitor Cancer's Recognition In Neutrosophic SuperHyperGraphs" in **Ref.** [**HG24**] by Henry Garrett (2023), "The Focus on The Partitions Obtained By Parallel Moves In The Cancer's Extreme Recognition With Different Types of Extreme SuperHyperMatching Set and Polynomial on (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG25**] by Henry Garrett (2023), "Extreme Failed SuperHyperClique Decides the Failures on the Cancer's Recognition in the Perfect Connections of Cancer's Attacks By SuperHyperModels Named (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG26**] by Henry Garrett (2023), "Indeterminacy On The All Possible Connections of Cells In Front of Cancer's Attacks In The Terms of Neutrosophic Failed SuperHyperClique on Cancer's Recognition called Neutrosophic SuperHyperGraphs" in **Ref.** [**HG27**] by Henry Garrett (2023), "Perfect Directions Toward Idealism in Cancer's Neutrosophic Recognition Forwarding Neutrosophic SuperHyperClique on Neutrosophic SuperHyperGraphs" in **Ref.** [**HG28**] by Henry Garrett (2023), "Demonstrating Complete Connections in Every Embedded Regions and Sub-Regions in the Terms of Cancer's Recognition and (Neutrosophic) SuperHyperGraphs With (Neutrosophic) SuperHyperClique" in **Ref.** [**HG29**] by Henry Garrett (2023), "Different Neutrosophic Types of Neutrosophic Regions titled neutrosophic Failed SuperHyperStable in Cancer's Neutrosophic Recognition modeled in the Form of Neutrosophic SuperHyperGraphs" in **Ref.** [**HG30**] by Henry Garrett (2023), "Using the Tool As (Neutrosophic) Failed SuperHyperStable To SuperHyperModel Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG31**] by Henry Garrett (2023), "Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints" in **Ref.** [**HG32**] by Henry Garrett (2023), "(Neutrosophic) SuperHyperStable on Cancer's Recognition by Well-SuperHyperModelled (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG33**] by Henry Garrett (2023), "Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond" in **Ref.** [**HG34**] by Henry Garrett (2022), "(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG35**] by Henry Garrett (2022), "Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs" in **Ref.** [**HG36**] by Henry Garrett (2022), "Basic Neutrosophic Notions Concerning SuperHyperDominating and Neutrosophic SuperHyperResolving in SuperHyperGraph" in **Ref.** [**HG37**] by Henry Garrett (2022), "Initial Material of Neutrosophic Preliminaries to Study Some Neutrosophic Notions Based on Neutrosophic SuperHyperEdge (NSHE) in Neutrosophic SuperHyperGraph (NSHG)" in **Ref.** [**HG38**] by Henry Garrett (2022), there are some endeavors to formalize the basic SuperHyperNotions about neutrosophic SuperHyperGraph and SuperHyperGraph.

Some studies and researches about neutrosophic graphs, are proposed as book in **Ref.** [**HG39**] by Henry Garrett (2022) which is indexed by Google Scholar and has more than 2732 readers in Scribd. It's titled "Beyond Neutrosophic Graphs" and published by Ohio: E-publishing: Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United State. This research book covers different types of notions and settings in neutrosophic graph theory and neutrosophic SuperHyperGraph theory.

Also, some studies and researches about neutrosophic graphs, are proposed as book in **Ref.** [**HG40**] by Henry Garrett (2022) which is indexed by Google Scholar and has more than 3504 readers in Scribd. It's titled "Neutrosophic Duality" and published by Florida: GLOBAL KNOWLEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. This research book presents different types of notions SuperHyperResolving and SuperHyperDominating in the setting

of duality in neutrosophic graph theory and neutrosophic SuperHyperGraph theory. This research book has scrutiny on the complement of the intended set and the intended set, simultaneously. It's smart to consider a set but acting on its complement that what's done in this research book which is popular in the terms of high readers in Scribd.
See the seminal researches [**HG1**; **HG2**; **HG3**]. The formalization of the notions on the framework of Extreme SuperHyperConnectivities theory, Neutrosophic SuperHyperConnectivities theory, and (Neutrosophic) SuperHyperGraphs theory at [**HG4**; **HG5**; **HG6**; **HG7**; **HG8**; **HG9**; **HG10**; **HG11**; **HG12**; **HG13**; **HG14**; **HG15**; **HG16**; **HG17**; **HG18**; **HG19**; **HG20**; **HG21**; **HG22**; **HG23**; **HG24**; **HG25**; **HG26**; **HG27**; **HG28**; **HG29**; **HG30**; **HG31**; **HG32**; **HG33**; **HG34**; **HG35**; **HG36**; **HG37**; **HG38**]. Two popular research books in Scribd in the terms of high readers, 2638 and 3363 respectively, on neutrosophic science is on [**HG39**; **HG40**].

CHAPTER 6

Motivation and Contributions

In this research, there are some ideas in the featured frameworks of motivations. I try to bring the motivations in the narrative ways. Some cells have been faced with some attacks from the situation which is caused by the cancer's attacks. In this case, there are some embedded analysis on the ongoing situations which in that, the cells could be labelled as some groups and some groups or individuals have excessive labels which all are raised from the behaviors to overcome the cancer's attacks. In the embedded situations, the individuals of cells and the groups of cells could be considered as "new groups". Thus it motivates us to find the proper SuperHyperModels for getting more proper analysis on this messy story. I've found the SuperHyperModels which are officially called "SuperHyperGraphs" and "Neutrosophic SuperHyperGraphs". In this SuperHyperModel, the cells and the groups of cells are defined as "SuperHyperVertices" and the relations between the individuals of cells and the groups of cells are defined as "SuperHyperEdges". Thus it's another motivation for us to do research on this SuperHyperModel based on the "Cancer's Recognition". Sometimes, the situations get worst. The situation is passed from the certainty and precise style. Thus it's the beyond them. There are three descriptions, namely, the degrees of determinacy, indeterminacy and neutrality, for any object based on vague forms, namely, incomplete data, imprecise data, and uncertain analysis. The latter model could be considered on the previous SuperHyperModel. It's SuperHyperModel. It's SuperHyperGraph but it's officially called "Neutrosophic SuperHyperGraphs". The cancer is the disease but the model is going to figure out what's going on this phenomenon. The special case of this disease is considered and as the consequences of the model, some parameters are used. The cells are under attack of this disease but the moves of the cancer in the special region are the matter of mind. The recognition of the cancer could help to find some treatments for this disease. The SuperHyperGraph and Neutrosophic SuperHyperGraph are the SuperHyperModels on the "Cancer's Recognition" and both bases are the background of this research. Sometimes the cancer has been happened on the region, full of cells, groups of cells and embedded styles. In this segment, the SuperHyperModel proposes some SuperHyperNotions based on the connectivities of the moves of the cancer in the forms of alliances' styles with the formation of the design and the architecture are formally called " SuperHyperConnectivities" in the themes of jargons and buzzwords. The prefix "SuperHyper" refers to the theme of the embedded styles to figure out the background for the SuperHyperNotions. The recognition of the cancer in the long-term function. The specific region has been assigned by the model [it's called SuperHyperGraph] and the long cycle of the move from the cancer is identified by this research. Sometimes the move of the cancer hasn't be easily identified since there are some determinacy, indeterminacy and neutrality about the moves and the effects of the cancer on that region; this event leads us to choose another model [it's said to be Neutrosophic

SuperHyperGraph] to have convenient perception on what's happened and what's done. There are some specific models, which are well-known and they've got the names, and some general models. The moves and the traces of the cancer on the complex tracks and between complicated groups of cells could be fantasized by an Extreme Extreme SuperHyperPath (-/SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultipartite, SuperHyperWheel). The aim is to find either the optimal SuperHyperConnectivities or the Extreme SuperHyperConnectivities in those Extreme SuperHyperModels. Some general results are introduced. Beyond that in SuperHyperStar, all possible Extreme SuperHyperPath s have only two SuperHyperEdges but it's not enough since it's essential to have at least three SuperHyperEdges to form any style of a SuperHyperConnectivities. There isn't any formation of any SuperHyperConnectivities but literarily, it's the deformation of any SuperHyperConnectivities. It, literarily, deforms and it doesn't form.

Question 6.0.1. *How to define the SuperHyperNotions and to do research on them to find the " amount of SuperHyperConnectivities" of either individual of cells or the groups of cells based on the fixed cell or the fixed group of cells, extensively, the "amount of SuperHyperConnectivities" based on the fixed groups of cells or the fixed groups of group of cells?*

Question 6.0.2. *What are the best descriptions for the "Cancer's Recognition" in terms of these messy and dense SuperHyperModels where embedded notions are illustrated?*

It's motivation to find notions to use in this dense model is titled "SuperHyperGraphs". Thus it motivates us to define different types of " SuperHyperConnectivities" and "Extreme SuperHyperConnectivities" on "SuperHyperGraph" and "Neutrosophic SuperHyperGraph". Then the research has taken more motivations to define SuperHyperClasses and to find some connections amid this SuperHyperNotion with other SuperHyperNotions. It motivates us to get some instances and examples to make clarifications about the framework of this research. The general results and some results about some connections are some avenues to make key point of this research, "Cancer's Recognition", more understandable and more clear.
The framework of this research is as follows. In the beginning, I introduce basic definitions to clarify about preliminaries. In the subsection "Preliminaries", initial definitions about SuperHyperGraphs and Neutrosophic SuperHyperGraph are deeply-introduced and in-depth-discussed. The elementary concepts are clarified and illustrated completely and sometimes review literature are applied to make sense about what's going to figure out about the upcoming sections. The main definitions and their clarifications alongside some results about new notions, SuperHyperConnectivities and Extreme SuperHyperConnectivities, are figured out in sections " SuperHyperConnectivities" and "Extreme SuperHyperConnectivities". In the sense of tackling on getting results and in order to make sense about continuing the research, the ideas of SuperHyperUniform and Extreme SuperHyperUniform are introduced and as their consequences, corresponded SuperHyperClasses are figured out to debut what's done in this section, titled "Results on SuperHyperClasses" and "Results on Extreme SuperHyperClasses". As going back to origin of the notions, there are some smart steps toward the common notions to extend the new notions in new frameworks, SuperHyperGraph and Neutrosophic SuperHyperGraph, in the sections "Results on SuperHyperClasses" and "Results on Extreme SuperHyperClasses". The starter research about the general SuperHyperRelations and as concluding and closing section of theoretical research are contained in the section "General Results". Some general SuperHyperRelations are fundamental and they are well-known as fundamental SuperHyperNotions as elicited and discussed in the sections, "General Results", " SuperHyperConnectivities", "Extreme SuperHyperConnectivities", "Results on SuperHyperClasses" and "Results on Extreme SuperHyperClasses". There are curious questions about what's done

about the SuperHyperNotions to make sense about excellency of this research and going to figure out the word "best" as the description and adjective for this research as presented in section, " SuperHyperConnectivities". The keyword of this research debut in the section "Applications in Cancer's Recognition" with two cases and subsections "Case 1: The Initial Steps Toward SuperHyperBipartite as SuperHyperModel" and "Case 2: The Increasing Steps Toward SuperHyperMultipartite as SuperHyperModel". In the section, "Open Problems", there are some scrutiny and discernment on what's done and what's happened in this research in the terms of "questions" and "problems" to make sense to figure out this research in featured style. The advantages and the limitations of this research alongside about what's done in this research to make sense and to get sense about what's figured out are included in the section, "Conclusion and Closing Remarks".

CHAPTER 7

Preliminaries

In this section, the basic material in this research, is referred to [Single Valued Neutrosophic Set](**Ref.**[**HG38**],Definition 2.2,p.2), [Neutrosophic Set](**Ref.**[**HG38**],Definition 2.1,p.1), [Neutrosophic SuperHyperGraph (NSHG)](**Ref.**[**HG38**],Definition 2.5,p.2), [Characterization of the Neutrosophic SuperHyperGraph (NSHG)](**Ref.**[**HG38**],Definition 2.7,p.3), [t-norm](**Ref.**[**HG38**], Definition 2.7, p.3), and [Characterization of the Neutrosophic SuperHyperGraph (NSHG)](**Ref.**[**HG38**],Definition 2.7,p.3), [Neutrosophic Strength of the Neutrosophic SuperHyperPaths] (**Ref.**[**HG38**],Definition 5.3,p.7), and [Different Neutrosophic Types of Neutrosophic SuperHyperEdges (NSHE)] (**Ref.**[**HG38**],Definition 5.4,p.7). Also, the new ideas and their clarifications are addressed to **Ref.**[**HG38**].
In this subsection, the basic material which is used in this research, is presented. Also, the new ideas and their clarifications are elicited.

Definition 7.0.1 (Neutrosophic Set)**.** (**Ref.**[**HG38**],Definition 2.1,p.1).
Let X be a space of points (objects) with generic elements in X denoted by x; then the **Neutrosophic set** A (NS A) is an object having the form

$$A = \{< x : T_A(x), I_A(x), F_A(x) >, x \in X\}$$

where the functions $T, I, F : X \to]^-0, 1^+[$ define respectively the a **truth-membership function**, an **indeterminacy-membership function**, and a **falsity-membership function** of the element $x \in X$ to the set A with the condition

$$^-0 \leq T_A(x) + I_A(x) + F_A(x) \leq 3^+.$$

The functions $T_A(x), I_A(x)$ and $F_A(x)$ are real standard or nonstandard subsets of $]^-0, 1^+[$.

Definition 7.0.2 (Single Valued Neutrosophic Set)**.** (**Ref.**[**HG38**],Definition 2.2,p.2).
Let X be a space of points (objects) with generic elements in X denoted by x. A **single valued Neutrosophic set** A (SVNS A) is characterized by truth-membership function $T_A(x)$, an indeterminacy-membership function $I_A(x)$, and a falsity-membership function $F_A(x)$. For each point x in X, $T_A(x), I_A(x), F_A(x) \in [0, 1]$. A SVNS A can be written as

$$A = \{< x : T_A(x), I_A(x), F_A(x) >, x \in X\}.$$

Definition 7.0.3. The **degree of truth-membership**, **indeterminacy-membership** and **falsity-membership of the subset** $X \subset A$ of the single valued Neutrosophic set $A = \{< x :$

$T_A(x), I_A(x), F_A(x) >, x \in X\}$:

$$T_A(X) = \min[T_A(v_i), T_A(v_j)]_{v_i, v_j \in X},$$

$$I_A(X) = \min[I_A(v_i), I_A(v_j)]_{v_i, v_j \in X},$$

$$\text{and } F_A(X) = \min[F_A(v_i), F_A(v_j)]_{v_i, v_j \in X}.$$

Definition 7.0.4. The **support** of $X \subset A$ of the single valued Neutrosophic set $A = \{< x : T_A(x), I_A(x), F_A(x) >, x \in X\}$:

$$supp(X) = \{x \in X : \ T_A(x), I_A(x), F_A(x) > 0\}.$$

Definition 7.0.5 (Neutrosophic SuperHyperGraph (NSHG))**.** (**Ref.**[**HG38**],Definition 2.5,p.2). Assume V' is a given set. a **Neutrosophic SuperHyperGraph** (NSHG) S is an ordered pair $S = (V, E)$, where

(*i*) $V = \{V_1, V_2, \ldots, V_n\}$ a finite set of finite single valued Neutrosophic subsets of V';

(*ii*) $V = \{(V_i, T_{V'}(V_i), I_{V'}(V_i), F_{V'}(V_i)) : \ T_{V'}(V_i), I_{V'}(V_i), F_{V'}(V_i) \geq 0\}, \ (i = 1, 2, \ldots, n)$;

(*iii*) $E = \{E_1, E_2, \ldots, E_{n'}\}$ a finite set of finite single valued Neutrosophic subsets of V;

(*iv*) $E = \{(E_{i'}, T'_V(E_{i'}), I'_V(E_{i'}), F'_V(E_{i'})) : \ T'_V(E_{i'}), I'_V(E_{i'}), F'_V(E_{i'}) \geq 0\}, \ (i' = 1, 2, \ldots, n')$;

(*v*) $V_i \neq \emptyset, \ (i = 1, 2, \ldots, n)$;

(*vi*) $E_{i'} \neq \emptyset, \ (i' = 1, 2, \ldots, n')$;

(*vii*) $\sum_i supp(V_i) = V, \ (i = 1, 2, \ldots, n)$;

(*viii*) $\sum_{i'} supp(E_{i'}) = V, \ (i' = 1, 2, \ldots, n')$;

(*ix*) and the following conditions hold:

$$T'_V(E_{i'}) \leq \min[T_{V'}(V_i), T_{V'}(V_j)]_{V_i, V_j \in E_{i'}},$$

$$I'_V(E_{i'}) \leq \min[I_{V'}(V_i), I_{V'}(V_j)]_{V_i, V_j \in E_{i'}},$$

$$\text{and } F'_V(E_{i'}) \leq \min[F_{V'}(V_i), F_{V'}(V_j)]_{V_i, V_j \in E_{i'}}$$

where $i' = 1, 2, \ldots, n'$.

Here the Neutrosophic SuperHyperEdges (NSHE) $E_{j'}$ and the Neutrosophic SuperHyperVertices (NSHV) V_j are single valued Neutrosophic sets. $T_{V'}(V_i), I_{V'}(V_i)$, and $F_{V'}(V_i)$ denote the degree of truth-membership, the degree of indeterminacy-membership and the degree of falsity-membership the Neutrosophic SuperHyperVertex (NSHV) V_i to the Neutrosophic SuperHyperVertex (NSHV) V. $T'_V(E_{i'}), T'_V(E_{i'})$, and $T'_V(E_{i'})$ denote the degree of truth-membership, the degree of indeterminacy-membership and the degree of falsity-membership of the Neutrosophic SuperHyperEdge (NSHE) $E_{i'}$ to the Neutrosophic SuperHyperEdge (NSHE) E. Thus, the ii'th element of the **incidence matrix** of Neutrosophic SuperHyperGraph (NSHG) are of the form $(V_i, T'_V(E_{i'}), I'_V(E_{i'}), F'_V(E_{i'}))$, the sets V and E are crisp sets.

Definition 7.0.6 (Characterization of the Neutrosophic SuperHyperGraph (NSHG))**.** (**Ref.**[**HG38**],Definition 2.7,p.3).
Assume a Neutrosophic SuperHyperGraph (NSHG) S is an ordered pair $S = (V, E)$. The Neutrosophic SuperHyperEdges (NSHE) $E_{i'}$ and the Neutrosophic SuperHyperVertices (NSHV) V_i of Neutrosophic SuperHyperGraph (NSHG) $S = (V, E)$ could be characterized as follow-up items.

(i) If $|V_i| = 1$, then V_i is called **vertex**;

(ii) if $|V_i| \geq 1$, then V_i is called **SuperVertex**;

(iii) if for all V_is are incident in $E_{i'}$, $|V_i| = 1$, and $|E_{i'}| = 2$, then $E_{i'}$ is called **edge**;

(iv) if for all V_is are incident in $E_{i'}$, $|V_i| = 1$, and $|E_{i'}| \geq 2$, then $E_{i'}$ is called **HyperEdge**;

(v) if there's a V_i is incident in $E_{i'}$ such that $|V_i| \geq 1$, and $|E_{i'}| = 2$, then $E_{i'}$ is called **SuperEdge**;

(vi) if there's a V_i is incident in $E_{i'}$ such that $|V_i| \geq 1$, and $|E_{i'}| \geq 2$, then $E_{i'}$ is called **SuperHyperEdge**.

If we choose different types of binary operations, then we could get hugely diverse types of general forms of Neutrosophic SuperHyperGraph (NSHG).

Definition 7.0.7 (t-norm)**.** (**Ref.**[**HG38**], Definition 2.7, p.3).
A binary operation $\otimes : [0, 1] \times [0, 1] \to [0, 1]$ is a ***t*-norm** if it satisfies the following for $x, y, z, w \in [0, 1]$:

(i) $1 \otimes x = x$;

(ii) $x \otimes y = y \otimes x$;

(iii) $x \otimes (y \otimes z) = (x \otimes y) \otimes z$;

(iv) If $w \leq x$ and $y \leq z$ then $w \otimes y \leq x \otimes z$.

Definition 7.0.8. The **degree of truth-membership**, **indeterminacy-membership** and **falsity-membership of the subset** $X \subset A$ of the single valued Neutrosophic set $A = \{< x : T_A(x), I_A(x), F_A(x) >, x \in X\}$ (with respect to t-norm T_{norm}):

$$T_A(X) = T_{norm}[T_A(v_i), T_A(v_j)]_{v_i, v_j \in X},$$

$$I_A(X) = T_{norm}[I_A(v_i), I_A(v_j)]_{v_i, v_j \in X},$$

$$\text{and } F_A(X) = T_{norm}[F_A(v_i), F_A(v_j)]_{v_i, v_j \in X}.$$

Definition 7.0.9. The **support** of $X \subset A$ of the single valued Neutrosophic set $A = \{< x : T_A(x), I_A(x), F_A(x) >, x \in X\}$:

$$supp(X) = \{x \in X : \ T_A(x), I_A(x), F_A(x) > 0\}.$$

Definition 7.0.10. (General Forms of Neutrosophic SuperHyperGraph (NSHG)).
Assume V' is a given set. a **Neutrosophic SuperHyperGraph** (NSHG) S is an ordered pair $S = (V, E)$, where

(i) $V = \{V_1, V_2, \ldots, V_n\}$ a finite set of finite single valued Neutrosophic subsets of V';

(ii) $V = \{(V_i, T_{V'}(V_i), I_{V'}(V_i), F_{V'}(V_i)) : T_{V'}(V_i), I_{V'}(V_i), F_{V'}(V_i) \geq 0\}, \ (i = 1, 2, \ldots, n)$;

(iii) $E = \{E_1, E_2, \ldots, E_{n'}\}$ a finite set of finite single valued Neutrosophic subsets of V;

(iv) $E = \{(E_{i'}, T'_V(E_{i'}), I'_V(E_{i'}), F'_V(E_{i'})) : T'_V(E_{i'}), I'_V(E_{i'}), F'_V(E_{i'}) \geq 0\}, \ (i' = 1, 2, \ldots, n')$;

(v) $V_i \neq \emptyset, \ (i = 1, 2, \ldots, n)$;

(vi) $E_{i'} \neq \emptyset, \ (i' = 1, 2, \ldots, n')$;

(vii) $\sum_i supp(V_i) = V, \ (i = 1, 2, \ldots, n)$;

(viii) $\sum_{i'} supp(E_{i'}) = V, \ (i' = 1, 2, \ldots, n')$.

Here the Neutrosophic SuperHyperEdges (NSHE) $E_{j'}$ and the Neutrosophic SuperHyperVertices (NSHV) V_j are single valued Neutrosophic sets. $T_{V'}(V_i), I_{V'}(V_i)$, and $F_{V'}(V_i)$ denote the degree of truth-membership, the degree of indeterminacy-membership and the degree of falsity-membership the Neutrosophic SuperHyperVertex (NSHV) V_i to the Neutrosophic SuperHyperVertex (NSHV) V. $T'_V(E_{i'}), T'_V(E_{i'})$, and $T'_V(E_{i'})$ denote the degree of truth-membership, the degree of indeterminacy-membership and the degree of falsity-membership of the Neutrosophic SuperHyperEdge (NSHE) $E_{i'}$ to the Neutrosophic SuperHyperEdge (NSHE) E. Thus, the ii'th element of the **incidence matrix** of Neutrosophic SuperHyperGraph (NSHG) are of the form $(V_i, T'_V(E_{i'}), I'_V(E_{i'}), F'_V(E_{i'}))$, the sets V and E are crisp sets.

Definition 7.0.11 (Characterization of the Neutrosophic SuperHyperGraph (NSHG))**.** (**Ref.**[**HG38**],Definition 2.7,p.3).
Assume a Neutrosophic SuperHyperGraph (NSHG) S is an ordered pair $S = (V, E)$. The Neutrosophic SuperHyperEdges (NSHE) $E_{i'}$ and the Neutrosophic SuperHyperVertices (NSHV) V_i of Neutrosophic SuperHyperGraph (NSHG) $S = (V, E)$ could be characterized as follow-up items.

(i) If $|V_i| = 1$, then V_i is called **vertex**;

(ii) if $|V_i| \geq 1$, then V_i is called **SuperVertex**;

(iii) if for all V_is are incident in $E_{i'}$, $|V_i| = 1$, and $|E_{i'}| = 2$, then $E_{i'}$ is called **edge**;

(iv) if for all V_is are incident in $E_{i'}$, $|V_i| = 1$, and $|E_{i'}| \geq 2$, then $E_{i'}$ is called **HyperEdge**;

(v) if there's a V_i is incident in $E_{i'}$ such that $|V_i| \geq 1$, and $|E_{i'}| = 2$, then $E_{i'}$ is called **SuperEdge**;

(vi) if there's a V_i is incident in $E_{i'}$ such that $|V_i| \geq 1$, and $|E_{i'}| \geq 2$, then $E_{i'}$ is called **SuperHyperEdge**.

This SuperHyperModel is too messy and too dense. Thus there's a need to have some restrictions and conditions on SuperHyperGraph. The special case of this SuperHyperGraph makes the patterns and regularities.

Definition 7.0.12. A graph is **SuperHyperUniform** if it's SuperHyperGraph and the number of elements of SuperHyperEdges are the same.

To get more visions on SuperHyperUniform, the some SuperHyperClasses are introduced. It makes to have SuperHyperUniform more understandable.

Definition 7.0.13. Assume a Neutrosophic SuperHyperGraph. There are some SuperHyperClasses as follows.

(i). It's **Neutrosophic SuperHyperPath** if it's only one SuperVertex as intersection amid two given SuperHyperEdges with two exceptions;

(ii). it's **SuperHyperCycle** if it's only one SuperVertex as intersection amid two given SuperHyperEdges;

(iii). it's **SuperHyperStar** it's only one SuperVertex as intersection amid all SuperHyperEdges;

(iv). it's **SuperHyperBipartite** it's only one SuperVertex as intersection amid two given SuperHyperEdges and these SuperVertices, forming two separate sets, has no SuperHyperEdge in common;

(v). it's **SuperHyperMultiPartite** it's only one SuperVertex as intersection amid two given SuperHyperEdges and these SuperVertices, forming multi separate sets, has no SuperHyperEdge in common;

(vi). it's **SuperHyperWheel** if it's only one SuperVertex as intersection amid two given SuperHyperEdges and one SuperVertex has one SuperHyperEdge with any common SuperVertex.

Definition 7.0.14. Let an ordered pair $S = (V, E)$ be a Neutrosophic SuperHyperGraph (NSHG) S. Then a sequence of Neutrosophic SuperHyperVertices (NSHV) and Neutrosophic SuperHyperEdges (NSHE)

$$V_1, E_1, V_2, E_2, V_3, \dots, V_{s-1}, E_{s-1}, V_s$$

is called a **Neutrosophic Neutrosophic SuperHyperPath** (NSHP) from Neutrosophic SuperHyperVertex (NSHV) V_1 to Neutrosophic SuperHyperVertex (NSHV) V_s if either of following conditions hold:

(i) $V_i, V_{i+1} \in E_{i'}$;

(ii) there's a vertex $v_i \in V_i$ such that $v_i, V_{i+1} \in E_{i'}$;

(iii) there's a SuperVertex $V'_i \in V_i$ such that $V'_i, V_{i+1} \in E_{i'}$;

(iv) there's a vertex $v_{i+1} \in V_{i+1}$ such that $V_i, v_{i+1} \in E_{i'}$;

(v) there's a SuperVertex $V'_{i+1} \in V_{i+1}$ such that $V_i, V'_{i+1} \in E_{i'}$;

(vi) there are a vertex $v_i \in V_i$ and a vertex $v_{i+1} \in V_{i+1}$ such that $v_i, v_{i+1} \in E_{i'}$;

(vii) there are a vertex $v_i \in V_i$ and a SuperVertex $V'_{i+1} \in V_{i+1}$ such that $v_i, V'_{i+1} \in E_{i'}$;

$(viii)$ there are a SuperVertex $V'_i \in V_i$ and a vertex $v_{i+1} \in V_{i+1}$ such that $V'_i, v_{i+1} \in E_{i'}$;

(ix) there are a SuperVertex $V'_i \in V_i$ and a SuperVertex $V'_{i+1} \in V_{i+1}$ such that $V'_i, V'_{i+1} \in E_{i'}$.

Definition 7.0.15. (Characterization of the Neutrosophic Neutrosophic SuperHyperPaths).
Assume a Neutrosophic SuperHyperGraph (NSHG) S is an ordered pair $S = (V, E)$. a Neutrosophic Neutrosophic SuperHyperPath (NSHP) from Neutrosophic SuperHyperVertex (NSHV) V_1 to Neutrosophic SuperHyperVertex (NSHV) V_s is sequence of Neutrosophic SuperHyperVertices (NSHV) and Neutrosophic SuperHyperEdges (NSHE)

$$V_1, E_1, V_2, E_2, V_3, \ldots, V_{s-1}, E_{s-1}, V_s,$$

could be characterized as follow-up items.

(i) If for all $V_i, E_{j'}$, $|V_i| = 1,\ |E_{j'}| = 2$, then NSHP is called **path**;

(ii) if for all $E_{j'}$, $|E_{j'}| = 2$, and there's V_i, $|V_i| \geq 1$, then NSHP is called **SuperPath**;

(iii) if for all $V_i, E_{j'}$, $|V_i| = 1,\ |E_{j'}| \geq 2$, then NSHP is called **HyperPath**;

(iv) if there are $V_i, E_{j'}$, $|V_i| \geq 1, |E_{j'}| \geq 2$, then NSHP is called **Neutrosophic SuperHyperPath** .

Definition 7.0.16 (Neutrosophic Strength of the Neutrosophic SuperHyperPaths)**.** (**Ref.**[**HG38**],Definition 5.3,p.7).
Assume a Neutrosophic SuperHyperGraph (NSHG) S is an ordered pair $S = (V, E)$. A Neutrosophic SuperHyperPath (NSHP) from Neutrosophic SuperHyperVertex (NSHV) V_1 to Neutrosophic SuperHyperVertex (NSHV) V_s is sequence of Neutrosophic SuperHyperVertices (NSHV) and Neutrosophic SuperHyperEdges (NSHE)

$$V_1, E_1, V_2, E_2, V_3, \ldots, V_{s-1}, E_{s-1}, V_s,$$

have

(i) **Neutrosophic t-strength** $(\min\{T(V_i)\}, m, n)_{i=1}^{s}$;

(ii) **Neutrosophic i-strength** $(m, \min\{I(V_i)\}, n)_{i=1}^{s}$;

(iii) **Neutrosophic f-strength** $(m, n, \min\{F(V_i)\})_{i=1}^{s}$;

(iv) **Neutrosophic strength** $(\min\{T(V_i)\}, \min\{I(V_i)\}, \min\{F(V_i)\})_{i=1}^{s}$.

Definition 7.0.17 (Different Neutrosophic Types of Neutrosophic SuperHyperEdges (NSHE))**.** (**Ref.**[**HG38**],Definition 5.4,p.7).
Assume a Neutrosophic SuperHyperGraph (NSHG) S is an ordered pair $S = (V, E)$. Consider a Neutrosophic SuperHyperEdge (NSHE) $E = \{V_1, V_2, \ldots, V_s\}$. Then E is called

(ix) **Neutrosophic t-connective** if $T(E) \geq$ maximum number of Neutrosophic t-strength of SuperHyperPath (NSHP) from Neutrosophic SuperHyperVertex (NSHV) V_i to Neutrosophic SuperHyperVertex (NSHV) V_j where $1 \leq i, j \leq s$;

(x) **Neutrosophic i-connective** if $I(E) \geq$ maximum number of Neutrosophic i-strength of SuperHyperPath (NSHP) from Neutrosophic SuperHyperVertex (NSHV) V_i to Neutrosophic SuperHyperVertex (NSHV) V_j where $1 \leq i, j \leq s$;

(xi) **Neutrosophic f-connective** if $F(E) \geq$ maximum number of Neutrosophic f-strength of SuperHyperPath (NSHP) from Neutrosophic SuperHyperVertex (NSHV) V_i to Neutrosophic SuperHyperVertex (NSHV) V_j where $1 \leq i, j \leq s$;

(xii) **Neutrosophic connective** if $(T(E), I(E), F(E)) \geq$ maximum number of Neutrosophic strength of SuperHyperPath (NSHP) from Neutrosophic SuperHyperVertex (NSHV) V_i to Neutrosophic SuperHyperVertex (NSHV) V_j where $1 \leq i, j \leq s$.

Definition 7.0.18. ((Neutrosophic) SuperHyperConnectivities).
Assume a Neutrosophic SuperHyperGraph (NSHG) S is an ordered pair $S = (V, E)$. Consider a Neutrosophic SuperHyperEdge (NSHE) $E = \{V_1, V_2, \ldots, V_s\}$. Then E is called

(i) an **Extreme SuperHyperConnectivities** if it's either of Neutrosophic t-connective, Neutrosophic i-connective, Neutrosophic f-connective, and Neutrosophic connective and $\mathcal{C}(NSHG)$ for an Extreme SuperHyperGraph $NSHG : (V, E)$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of high Extreme cardinality of the Extreme SuperHyperEdges in the consecutive Extreme sequence of Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities;

(ii) a **Neutrosophic SuperHyperConnectivities** if it's either of Neutrosophic t-connective, Neutrosophic i-connective, Neutrosophic f-connective, and Neutrosophic connective and $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Neutrosophic cardinality of the Neutrosophic SuperHyperEdges of a Neutrosophic SuperHyperSet S of high Neutrosophic cardinality consecutive Neutrosophic SuperHyperEdges and Neutrosophic SuperHyperVertices such that they form the Neutrosophic SuperHyperConnectivities;

(iii) an **Extreme SuperHyperConnectivities SuperHyperPolynomial** if it's either of Neutrosophic t-connective, Neutrosophic i-connective, Neutrosophic f-connective, and Neutrosophic connective and $\mathcal{C}(NSHG)$ for an Extreme SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the Extreme coefficients defined as the Extreme number of the maximum Extreme cardinality of the Extreme SuperHyperEdges of an Extreme SuperHyperSet S of high Extreme cardinality consecutive Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; and the Extreme power is corresponded to its Extreme coefficient;

(iv) a **Neutrosophic SuperHyperConnectivities SuperHyperPolynomial** if it's either of Neutrosophic t-connective, Neutrosophic i-connective, Neutrosophic f-connective, and Neutrosophic connective and $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Neutrosophic SuperHyperPolynomial contains the Neutrosophic coefficients defined as the Neutrosophic number of the maximum Neutrosophic cardinality of the Neutrosophic SuperHyperEdges of a Neutrosophic SuperHyperSet S of high Neutrosophic cardinality consecutive Neutrosophic SuperHyperEdges and Neutrosophic SuperHyperVertices such that they form the Neutrosophic SuperHyperConnectivities; and the Neutrosophic power is corresponded to its Neutrosophic coefficient;

(v) an **Extreme R-SuperHyperConnectivities** if it's either of Neutrosophic t-connective, Neutrosophic i-connective, Neutrosophic f-connective, and Neutrosophic connective and $\mathcal{C}(NSHG)$ for an Extreme SuperHyperGraph $NSHG : (V, E)$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of high Extreme cardinality of the Extreme

SuperHyperVertices in the consecutive Extreme sequence of Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities;

(*vi*) a **Neutrosophic R-SuperHyperConnectivities** if it's either of Neutrosophic t-connective, Neutrosophic i-connective, Neutrosophic f-connective, and Neutrosophic connective and $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the maximum Neutrosophic cardinality of the Neutrosophic SuperHyperVertices of a Neutrosophic SuperHyperSet S of high Neutrosophic cardinality consecutive Neutrosophic SuperHyperEdges and Neutrosophic SuperHyperVertices such that they form the Neutrosophic SuperHyperConnectivities;

(*vii*) an **Extreme R-SuperHyperConnectivities SuperHyperPolynomial** if it's either of Neutrosophic t-connective, Neutrosophic i-connective, Neutrosophic f-connective, and Neutrosophic connective and $\mathcal{C}(NSHG)$ for an Extreme SuperHyperGraph $NSHG : (V, E)$ is the Extreme SuperHyperPolynomial contains the Extreme coefficients defined as the Extreme number of the maximum Extreme cardinality of the Extreme SuperHyperVertices of an Extreme SuperHyperSet S of high Extreme cardinality consecutive Extreme SuperHyperEdges and Extreme SuperHyperVertices such that they form the Extreme SuperHyperConnectivities; and the Extreme power is corresponded to its Extreme coefficient;

(*viii*) a **Neutrosophic SuperHyperConnectivities SuperHyperPolynomial** if it's either of Neutrosophic t-connective, Neutrosophic i-connective, Neutrosophic f-connective, and Neutrosophic connective and $\mathcal{C}(NSHG)$ for a Neutrosophic SuperHyperGraph $NSHG : (V, E)$ is the Neutrosophic SuperHyperPolynomial contains the Neutrosophic coefficients defined as the Neutrosophic number of the maximum Neutrosophic cardinality of the Neutrosophic SuperHyperVertices of a Neutrosophic SuperHyperSet S of high Neutrosophic cardinality consecutive Neutrosophic SuperHyperEdges and Neutrosophic SuperHyperVertices such that they form the Neutrosophic SuperHyperConnectivities; and the Neutrosophic power is corresponded to its Neutrosophic coefficient.

Definition 7.0.19. ((Extreme/Neutrosophic)$\delta-$SuperHyperConnectivities).
Assume a SuperHyperGraph. Then

(*i*) an $\delta-$**SuperHyperConnectivities** is a Neutrosophic kind of Neutrosophic SuperHyperConnectivities such that either of the following expressions hold for the Neutrosophic cardinalities of SuperHyperNeighbors of $s \in S$:

$$|S \cap N(s)| > |S \cap (V \setminus N(s))| + \delta;$$
$$|S \cap N(s)| < |S \cap (V \setminus N(s))| + \delta.$$

The Expression (7.1), holds if S is an $\delta-$**SuperHyperOffensive**. And the Expression (7.1), holds if S is an $\delta-$**SuperHyperDefensive**;

(*ii*) a **Neutrosophic** $\delta-$**SuperHyperConnectivities** is a Neutrosophic kind of Neutrosophic SuperHyperConnectivities such that either of the following Neutrosophic expressions hold for the Neutrosophic cardinalities of SuperHyperNeighbors of $s \in S$:

$$|S \cap N(s)|_{Neutrosophic} > |S \cap (V \setminus N(s))|_{Neutrosophic} + \delta;$$
$$|S \cap N(s)|_{Neutrosophic} < |S \cap (V \setminus N(s))|_{Neutrosophic} + \delta.$$

Table 7.1: The Values of Vertices, SuperVertices, Edges, HyperEdges, and SuperHyperEdges Belong to The Neutrosophic SuperHyperGraph Mentioned in the Definition (7.0.22)

The Values of The Vertices	The Number of Position in Alphabet
The Values of The SuperVertices	The maximum Values of Its Vertices
The Values of The Edges	The maximum Values of Its Vertices
The Values of The HyperEdges	The maximum Values of Its Vertices
The Values of The SuperHyperEdges	The maximum Values of Its Endpoints

Table 7.2: The Values of Vertices, SuperVertices, Edges, HyperEdges, and SuperHyperEdges Belong to The Neutrosophic SuperHyperGraph, Mentioned in the Definition (7.0.21)

The Values of The Vertices	The Number of Position in Alphabet
The Values of The SuperVertices	The maximum Values of Its Vertices
The Values of The Edges	The maximum Values of Its Vertices
The Values of The HyperEdges	The maximum Values of Its Vertices
The Values of The SuperHyperEdges	The maximum Values of Its Endpoints

The Expression (7.1), holds if S is a **Neutrosophic $\delta-$SuperHyperOffensive**. And the Expression (7.1), holds if S is a **Neutrosophic $\delta-$SuperHyperDefensive**.

For the sake of having a Neutrosophic SuperHyperConnectivities, there's a need to "**redefine**" the notion of "Neutrosophic SuperHyperGraph". The SuperHyperVertices and the SuperHyperEdges are assigned by the labels from the letters of the alphabets. In this procedure, there's the usage of the position of labels to assign to the values.

Definition 7.0.20. Assume a Neutrosophic SuperHyperGraph. It's redefined **Neutrosophic SuperHyperGraph** if the Table (7.1) holds.

It's useful to define a "Neutrosophic" version of SuperHyperClasses. Since there's more ways to get Neutrosophic type-results to make a Neutrosophic more understandable.

Definition 7.0.21. Assume a Neutrosophic SuperHyperGraph. There are some **Neutrosophic SuperHyperClasses** if the Table (7.2) holds. Thus Neutrosophic SuperHyperPath , SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultiPartite, and SuperHyperWheel, are **Neutrosophic SuperHyperPath** , **Neutrosophic SuperHyperConnectivities**, **Neutrosophic SuperHyperStar**, **Neutrosophic SuperHyperBipartite**, **Neutrosophic SuperHyperMultiPartite**, and **Neutrosophic SuperHyperWheel** if the Table (7.2) holds.

It's useful to define a "Neutrosophic" version of a Neutrosophic SuperHyperConnectivities. Since there's more ways to get type-results to make a Neutrosophic SuperHyperConnectivities more Neutrosophicly understandable.
For the sake of having a Neutrosophic SuperHyperConnectivities, there's a need to "**redefine**" the Neutrosophic notion of "Neutrosophic SuperHyperConnectivities". The SuperHyperVertices and the SuperHyperEdges are assigned by the labels from the letters of the alphabets. In this procedure, there's the usage of the position of labels to assign to the values.

Table 7.3: The Values of Vertices, SuperVertices, Edges, HyperEdges, and SuperHyperEdges Belong to The Neutrosophic SuperHyperGraph Mentioned in the Definition (7.0.22)

The Values of The Vertices	The Number of Position in Alphabet
The Values of The SuperVertices	The maximum Values of Its Vertices
The Values of The Edges	The maximum Values of Its Vertices
The Values of The HyperEdges	The maximum Values of Its Vertices
The Values of The SuperHyperEdges	The maximum Values of Its Endpoints

Definition 7.0.22. Assume a SuperHyperConnectivities. It's redefined a **Neutrosophic SuperHyperConnectivities** if the Table (7.3) holds.

CHAPTER 8

Extreme SuperHyperConnectivities

The Extreme SuperHyperNotion, namely, Extreme SuperHyperConnectivities, is up. Thus the non-obvious Extreme SuperHyperConnectivities, S is up. The Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is: S is an Extreme SuperHyperSet, is: S does includes only more than two Extreme SuperHyperVertices in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple[non-simple] Extreme type-SuperHyperSets called the

SuperHyperConnectivities,

is only and only S in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. But all only obvious[non-obvious] simple[non-simple] Extreme type-SuperHyperSets of the obvious[non-obvious] simple[non-simple] Extreme SuperHyperConnectivities amid those type-SuperHyperSets, are S. A connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ as a linearly-over-packed SuperHyperModel is featured on the Figures.

Example 8.0.1. Assume the SuperHyperGraphs in the Figures (8.1), (8.2), (8.3), (8.4), (8.5), (8.6), (8.7), (8.8), (8.9), (8.10), (8.11), (8.12), (8.13), (8.14), (8.15), (8.16), (8.17), (8.18), (8.19), and (8.20).

- On the Figure (8.1), the Extreme SuperHyperNotion, namely, Extreme SuperHyperConnectivities, is up. E_1 and E_3 are some empty Extreme SuperHyperEdges but E_2 is a loop Extreme SuperHyperEdge and E_4 is an Extreme SuperHyperEdge. Thus in the terms of Extreme SuperHyperNeighbor, there's only one Extreme SuperHyperEdge, namely, E_4. The Extreme SuperHyperVertex, V_3 is Extreme isolated means that there's no Extreme SuperHyperEdge has it as an Extreme endpoint. Thus the Extreme SuperHyperVertex, V_3, **is** excluded in every given Extreme SuperHyperConnectivities.

  $\mathcal{C}(NSHG) = \{E_4\}$ is an Extreme SuperHyperConnectivities.

  $\mathcal{C}(NSHG) = z$ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.

  $\mathcal{C}(NSHG) = \{V_i\}_{i \neq 3}$ is an Extreme R-SuperHyperConnectivities.

  $\mathcal{C}(NSHG) = 3z$ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.

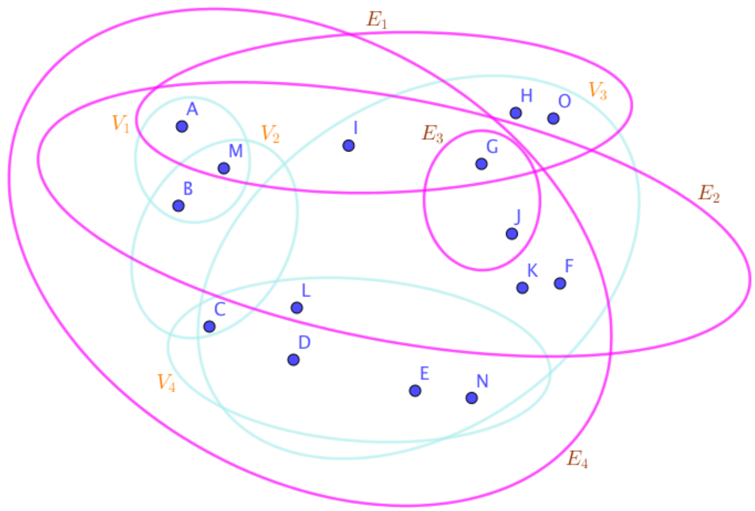

Figure 8.1: The Neutrosophic SuperHyperGraphs Associated to the Extreme Notions of Extreme SuperHyperConnectivities in the Extreme Example (8.0.1)

- On the Figure (8.2), the Extreme SuperHyperNotion, namely, Extreme SuperHyperConnectivities, is up. E_1, E_2 and E_3 are some empty Extreme SuperHyperEdges but E_4 is an Extreme SuperHyperEdge. Thus in the terms of Extreme SuperHyperNeighbor, there's only one Extreme SuperHyperEdge, namely, E_4. The Extreme SuperHyperVertex, V_3 is Extreme isolated means that there's no Extreme SuperHyperEdge has it as an Extreme endpoint. Thus the Extreme SuperHyperVertex, V_3, **is** excluded in every given Extreme SuperHyperConnectivities.

$$\mathcal{C}(NSHG) = \{E_4\} \text{ is an Extreme SuperHyperConnectivities.}$$
$$\mathcal{C}(NSHG) = z \text{ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.}$$
$$\mathcal{C}(NSHG) = \{V_i\}_{i \neq 3} \text{ is an Extreme R-SuperHyperConnectivities.}$$
$$\mathcal{C}(NSHG) = 3z \text{ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.}$$

- On the Figure (8.3), the Extreme SuperHyperNotion, namely, Extreme SuperHyperConnectivities, is up. E_1 and E_3 are some empty Extreme SuperHyperEdges but E_2 is a loop Extreme SuperHyperEdge and E_4 is an Extreme SuperHyperEdge. Thus in the terms of Extreme SuperHyperNeighbor, there's only one Extreme SuperHyperEdge, namely, E_4. The Extreme SuperHyperVertex, V_3 is Extreme isolated means that there's no Extreme SuperHyperEdge has it as an Extreme endpoint. Thus the Extreme SuperHyperVertex, V_3, **is** excluded in every given Extreme SuperHyperConnectivities. $\{V_4, E_4, V_1, E_2, V_1\}$ is the optimal Extreme SuperHyperConnectivities since the E_2 is a loop Extreme SuperHyperEdge, then it could be used twice in the consecutive sequence but the usages of the Extreme SuperHyperEdges are once in every consecutive sequence with the exceptions on the loop Extreme SuperHyperEdges. It's with interesting to mention that there's no restrictions and no conditions by the times of the usages of Extreme SuperHyperVertices since the restrictions and the

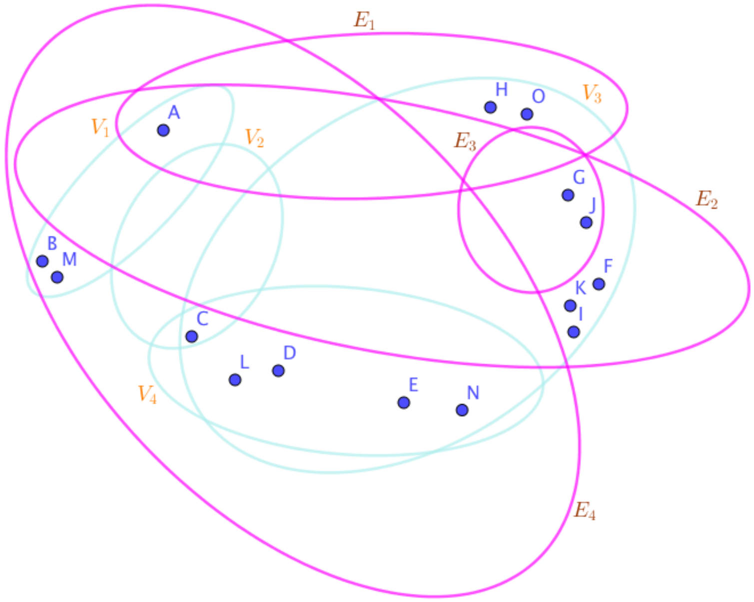

Figure 8.2: The Neutrosophic SuperHyperGraphs Associated to the Extreme Notions of Extreme SuperHyperConnectivities in the Extreme Example (8.0.1)

conditions by the times of the usages of Extreme SuperHyperEdges imply the times of the usages of Extreme SuperHyperVertices is once in any given consecutive sequence with the exceptions on the loop Extreme SuperHyperEdges that only imply the times of the usages of Extreme SuperHyperVertices is twice in any given consecutive sequence. To sum them up, in every consecutive sequence, the times of the usages of Extreme SuperHyperVertices is once if they've not been corresponded to the loop Extreme SuperHyperEdges, the times of the usages of Extreme SuperHyperVertices is twice if they've been corresponded to the loop Extreme SuperHyperEdges, and the times of the usages of Extreme SuperHyperEdges is once if either they've been corresponded to the loop Extreme SuperHyperEdges or not.

$$\mathcal{C}(NSHG) = \{E_4, E_2\} \text{ is an Extreme SuperHyperConnectivities.}$$
$$\mathcal{C}_{\text{Extreme SuperHyperConnectivities SuperHyperPolynomial}}(NSHG) = 2z^2.$$
$$\mathcal{C}(NSHG) = \{V_i, V_1, V_i\}_{i\neq 3} \text{ is an Extreme R-SuperHyperConnectivities.}$$
$$\mathcal{C}_{\text{Extreme R-SuperHyperConnectivities SuperHyperPolynomial}}(NSHG) = 3z^3.$$

- On the Figure (8.4), the SuperHyperNotion, namely, a SuperHyperConnectivities, is up. There's no empty SuperHyperEdge but E_3 are a loop SuperHyperEdge on $\{F\}$, and there are some SuperHyperEdges, namely, E_1 on $\{H, V_1, V_3\}$, alongside E_2 on $\{O, H, V_4, V_3\}$ and

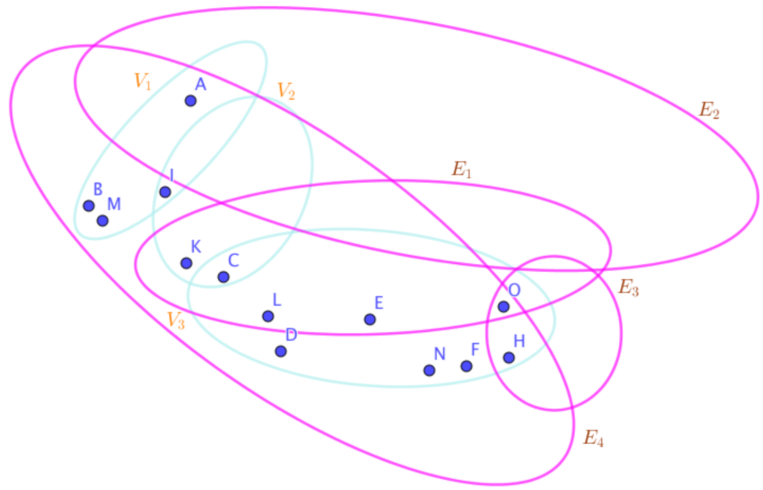

Figure 8.3: The Neutrosophic SuperHyperGraphs Associated to the Extreme Notions of Extreme SuperHyperConnectivities in the Extreme Example (8.0.1)

E_4, E_5 on $\{N, V_1, V_2, V_3, F\}$.

$$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\} \text{ is an Extreme SuperHyperConnectivities.}$$
$$\mathcal{C}(NSHG) = 4z^3 \text{ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.}$$
$$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\} \text{ is an Extreme R-SuperHyperConnectivities.}$$
$$\mathcal{C}(NSHG) = 4z^4 \text{ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.}$$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\} \text{ is an Extreme SuperHyperConnectivities.}$$
$$\mathcal{C}(NSHG) = 4z^3 \text{ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.}$$
$$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\} \text{ is an Extreme R-SuperHyperConnectivities.}$$
$$\mathcal{C}(NSHG) = 4z^4 \text{ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.}$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\} \text{ is an Extreme SuperHyperConnectivities.}$$
$$\mathcal{C}(NSHG) = 4z^3 \text{ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.}$$
$$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\} \text{ is an Extreme R-SuperHyperConnectivities.}$$
$$\mathcal{C}(NSHG) = 4z^4 \text{ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.}$$

Is a **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices. There are less than only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\}$ is an Extreme SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^3$ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.
$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\}$ is an Extreme R-SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^4$ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.

Doesn't have less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\}$ is an Extreme SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^3$ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.
$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\}$ is an Extreme R-SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^4$ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.

Isn't the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\}$ is an Extreme SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^3$ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.
$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\}$ is an Extreme R-SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^4$ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities, but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices, given by that Extreme type-SuperHyperSet; and it's called the Extreme SuperHyperConnectivities **and** it's a **Extreme SuperHyperConnectivities**. Since it **has**

the maximum Extreme cardinality of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There are only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\}$ is an Extreme SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^3$ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.
$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\}$ is an Extreme R-SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^4$ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.

Thus the obvious Extreme SuperHyperConnectivities,

$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\}$ is an Extreme SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^3$ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.
$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\}$ is an Extreme R-SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^4$ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\}$ is an Extreme SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^3$ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.
$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\}$ is an Extreme R-SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^4$ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.

Is the Extreme SuperHyperSet, is:

$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\}$ is an Extreme SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^3$ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.
$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\}$ is an Extreme R-SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^4$ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple[non-simple] Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$\mathcal{C}(NSHG) = \{V_3, E_1, V_4, E_2, H, E_1, V_3\}$ is an Extreme SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^3$ is an Extreme SuperHyperConnectivities SuperHyperPolynomial.
$\mathcal{C}(NSHG) = \{V_3, V_4, H, V_3\}$ is an Extreme R-SuperHyperConnectivities.
$\mathcal{C}(NSHG) = 4z^4$ is an Extreme R-SuperHyperConnectivities SuperHyperPolynomial.

- On the Figure (8.5), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities.

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

Is a **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices. There are less than only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

Doesn't have less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

Isn't the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities, but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices, given by that Extreme type-SuperHyperSet; and it's called the Extreme SuperHyperConnectivities **and** it's a **Extreme SuperHyperConnectivities**. Since it **has the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There are only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

Thus the obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

Is the Extreme SuperHyperSet, is:

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple[non-simple] Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities}} = \{V_5, E_1, V_4, E_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^2.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities}} = \{V_5, V_4, V_5\}.$$
$$\mathcal{C}(NSHG)_{\text{Extreme Quasi-R-SuperHyperConnectivities SuperHyperPolynomial}} = 2z^3.$$

- On the Figure (8.6), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge.

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.$$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.$$

Is a **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices. There are more than only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious

Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.$$

Doesn't have less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_i, V_{i+1}\}_{i=1}^{21}$$
$$\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities, but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges.

There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices, given by that Extreme type-SuperHyperSet; and it's called the Extreme SuperHyperConnectivities **and** it's a **Extreme SuperHyperConnectivities**. Since it **has the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There aren't only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}\\
&\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.\\
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =\\
&\{V_i, V_{i+1}\}_{i=1}^{21}\\
&\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.
\end{aligned}$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}\\
&\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.\\
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =\\
&\{V_i, V_{i+1}\}_{i=1}^{21}\\
&\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.
\end{aligned}$$

Is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}\\
&\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.\\
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =\\
&\{V_i, V_{i+1}\}_{i=1}^{21}\\
&\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.
\end{aligned}$$

Is the Extreme SuperHyperSet, is:

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21}\\
&\cup\{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.
\end{aligned}$$

$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.$
$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$
$\{V_i, V_{i+1}\}_{i=1}^{21}$
$\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.$
$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.$

Doesn't include only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple[non-simple] Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{V_i, E_i, V_{i+1}\}_{i=1}^{21} \cup \{V_{22}, E_{32}, V_i, E_{i+11}, E_{11}, V_1\}_{j=21-j}^{9}.$
$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{22}.$
$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$
$\{V_i, V_{i+1}\}_{i=1}^{21}$
$\cup\{V_{22}, V_i, V_1\}_{j=21-j}^{9}.$
$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^{23}.$

- On the Figure (8.7), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$
$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$
$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$
$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$
$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$
$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme

SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$$

Is a **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices. There are more than only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$$

Doesn't have less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme

SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities, but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices, given by that Extreme type-SuperHyperSet; and it's called the Extreme SuperHyperConnectivities **and** it's a **Extreme SuperHyperConnectivities**. Since it **has the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There aren't only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$$

Is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$$

Is the Extreme SuperHyperSet, is:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$$

Doesn't include only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple[non-simple] Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$

$\{V_8, E_{17}, V_{14}, E_{12}, V_{12}, E_{15}, V_3, E_3, V_4, E_{16}, V_7, E_7, V_8\}$
$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 6z^6.$
$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$
$\{V_8, V_{14}, V_{12}, V_3, V_4, V_7, V_8\}$

$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 6z^7.$

- On the Figure (8.8), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is a **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices. There are less than only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Does has less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Isn't the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities, but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges.

There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices, given by that Extreme type-SuperHyperSet; and it's called the Extreme SuperHyperConnectivities **and** it's a **Extreme SuperHyperConnectivities**. Since it **has the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There are only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Thus the obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the Extreme SuperHyperSet, is:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only Extreme type-SuperHyperSet called the amid those obvious[non-obvious] simple[non-simple] Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ of dense SuperHyperModel as the Figure (8.8).

- On the Figure (8.9), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. There's no coverage on either all SuperHyperVertices or all SuperHyperEdges. Thus the quasi-discussion on the intended notion is up. Disclaimer: The terms are in this item are referred to the prefix "quasi" since the notion isn't seen and applied totally but somehow the coincidence is achieved in the terms of neither of all SuperHyperVertices or all SuperHyperEdges in any coverage. Thus the terms Extreme SuperHyperConnectivities, Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial, Extreme R-Quasi-SuperHyperConnectivities, and Extreme R-Quasi-SuperHyperConnectivities SuperHyperPolynomial are up even neither of the analogous terms have the prefix 'quasi" and even more all the context are about the quasi-style of the studied notion and the used notion is quasi-notion even they're addressed without the term "quasi". Furthermore, for the convenient usage and the harmony of the context with the used title and other applied segments , the term "quasi" isn't used more than the following groups of expressions.

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^{5}$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^{5}$$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^6.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$
$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^5$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^6.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$
$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^5$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^6.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$

Is a **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices. There aren't less than only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$
$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^5$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^6.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$

Doesn't have less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme

SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^{5}$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^{5}$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities, but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There's no Extreme SuperHyperConnectivities such that it has all Extreme SuperHyperVertices, given by that Extreme type-SuperHyperSet; and it's called the Extreme SuperHyperConnectivities **and** it's a **Extreme SuperHyperConnectivities**. Since it **has the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities but it has either all Extreme SuperHyperEdges or all Extreme SuperHyperVertices and in this case, it has all Extreme SuperHyperEdges. There aren't only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^{5}$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^{5}$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$

$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$

Is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^{5}$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$

Is the Extreme SuperHyperSet, is:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^{5}$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$

Doesn't include only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple[non-simple] Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_i, E_i, V_6, E_{17}, V_{16}, d_1, V_1\}_{i=2}^{5}$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_1, V_i, V_{16}, V_1\}_{i=2}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 11z^8.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ of highly-embedding-connected SuperHyperModel as the Figure (8.9).

- On the Figure (8.10), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. There's no coverage on either all

SuperHyperVertices or all SuperHyperEdges. Thus the quasi-discussion on the intended notion is up. Disclaimer: The terms are in this item are referred to the prefix "quasi" since the notion isn't seen and applied totally but somehow the coincidence is achieved in the terms of neither of all SuperHyperVertices or all SuperHyperEdges in any coverage. Thus the terms Extreme SuperHyperConnectivities, Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial, Extreme R-Quasi-SuperHyperConnectivities, and Extreme R-Quasi-SuperHyperConnectivities SuperHyperPolynomial are up even neither of the analogous terms have the prefix 'quasi" and even more all the context are about the quasi-style of the studied notion and the used notion is quasi-notion even they're addressed without the term "quasi". Furthermore, for the convenient usage and the harmony of the context with the used title and other applied segments , the term "quasi" isn't used more than the following groups of expressions. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

Does has less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

Is the Extreme SuperHyperSet, is:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$

$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_{14}, E_4, V_{12}, E_6, V_{13}, E_7, V_{14}\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^3.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_{14}V_{12}, V_{13}, V_{14}\}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^4.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ of dense SuperHyperModel as the Figure (8.10).

- On the Figure (8.11), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^6.$$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme

SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities Super Hyper Polynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities Super Hyper Polynomial} = 3z^6.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities Super Hyper Polynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities Super Hyper Polynomial} = 3z^6.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities Super Hyper Polynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities Super Hyper Polynomial} = 3z^6.$$

Does has less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^6.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^6.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^6.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^6.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is not:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^6.$$

Is the Extreme SuperHyperSet, is not:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^6.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_6, V_5, E_5, V_6, E_4, V_4, E_7, V_2, E_1, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 3z^5.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} =$$
$$\{V_1, V_5, V_6, V_4, V_2, V_1\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 3z^6.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.

- On the Figure (8.12), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. There's only one Extreme

SuperHyperEdges between any given Extreme amount of Extreme SuperHyperVertices. Thus there isn't any Extreme SuperHyperConnectivities at all. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Does has less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}\\
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.
\end{aligned}$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}\\
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.
\end{aligned}$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}\\
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.
\end{aligned}$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}\\
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}\\
&\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.
\end{aligned}$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is not:

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}\\
&\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.
\end{aligned}$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the Extreme SuperHyperSet, is not:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

“Extreme SuperHyperConnectivities”

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{\}$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.

- On the Figure (8.13), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the

Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities Super Hyper Polynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities Super Hyper Polynomial} = z^6.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities Super Hyper Polynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities Super Hyper Polynomial} = z^6.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities Super Hyper Polynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities Super Hyper Polynomial} = z^6.$$

Does has less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{Extreme Super Hyper Connectivities Super Hyper Polynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{Extreme R-Super Hyper Connectivities} = \{V_i\}_{i=1}^{6}.$$

$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is not:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$

Is the Extreme SuperHyperSet, is not:

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivities} =$$
$$\{V_1, E_1, V_2, E_{10}, V_3, E_8, V_6, E_4, V_4, E_2, V_5, E_6, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeSuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivities} = \{V_i\}_{i=1}^{6}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-SuperHyperConnectivitiesSuperHyperPolynomial} = z^6.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.

- On the Figure (8.14), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Doesn't have less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the Extreme SuperHyperSet, is:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. It's noted that this Extreme SuperHyperGraph $ESHG : (V, E)$ is an Extreme graph $G : (V, E)$ thus the notions in both settings are coincided.

- On the Figure (8.15), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Doesn't have less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the Extreme SuperHyperSet, is:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. It's noted that this Extreme SuperHyperGraph $ESHG : (V, E)$ is an Extreme graph $G : (V, E)$ thus the notions in both settings are coincided. In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ as Linearly-Connected SuperHyperModel On the Figure (8.15).

- On the Figure (8.16), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{8}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{9}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{3}, V_{9}, E_{4}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{3}, V_{10}, E_{4}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{3}, V_{11}, E_{4}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{3}, V_{8}, E_{4}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{3}, V_{10}, E_{4}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{3}, V_{11}, E_{4}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_{3}, V_{8}, E_{4}, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_{3}, V_{9}, E_{4}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_{3}, V_{11}, E_{4}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_{3}, V_{8}, E_{4}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_{3}, V_{9}, E_{4}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_{3}, V_{10}, E_{4}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{4}, V_{9}, E_{3}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{4}, V_{10}, E_{3}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{4}, V_{11}, E_{3}, V_{8}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{4}, V_{8}, E_{3}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{4}, V_{10}, E_{3}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{4}, V_{11}, E_{3}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_{4}, V_{8}, E_{3}, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Does has less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyper-Connectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.

- On the Figure (8.17), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Does has less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyper-

Connectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

<u>Is</u> the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 28z^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 14z^3.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.

- On the Figure (8.18), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_{23}, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_{23}, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{8}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{9}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{1}, V_{23}, V_{1}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_{1}, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{3}, V_{9}, E_{4}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{3}, V_{10}, E_{4}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{3}, V_{11}, E_{4}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{3}, V_{8}, E_{4}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{3}, V_{10}, E_{4}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{3}, V_{11}, E_{4}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_{3}, V_{8}, E_{4}, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_{3}, V_{9}, E_{4}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_{3}, V_{11}, E_{4}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_{3}, V_{8}, E_{4}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_{3}, V_{9}, E_{4}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_{3}, V_{10}, E_{4}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{4}, V_{9}, E_{3}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{4}, V_{10}, E_{3}, V_{8}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{8}, E_{4}, V_{11}, E_{3}, V_{8}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{4}, V_{8}, E_{3}, V_{9}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{9}, E_{4}, V_{10}, E_{3}, V_{9}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_{23}, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$$

Does has less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyper-Connectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme

SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_{23}, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_{23}, V_1\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_1, V_{23}\}.$
$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$

erHyperGirth $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG:(V,E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_8,E_3,V_9,E_4,V_8\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_8,E_3,V_{10},E_4,V_8\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_8,E_3,V_{11},E_4,V_8\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_9,E_3,V_8,E_4,V_9\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_9,E_3,V_{10},E_4,V_9\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_9,E_3,V_{11},E_4,V_9\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{10},E_3,V_8,E_4,V_{10}\}.
\end{aligned}$$

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{10},E_3,V_9,E_4,V_{10}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{10},E_3,V_{11},E_4,V_{10}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{11},E_3,V_8,E_4,V_{11}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{11},E_3,V_9,E_4,V_{11}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{11},E_3,V_{10},E_4,V_{11}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_8,E_4,V_9,E_3,V_8\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_8,E_4,V_{10},E_3,V_8\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_8,E_4,V_{11},E_3,V_8\}.
\end{aligned}$$

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_9,E_4,V_8,E_3,V_9\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_9,E_4,V_{10},E_3,V_9\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_9,E_4,V_{11},E_3,V_9\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{10},E_4,V_8,E_3,V_{10}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{10},E_4,V_9,E_3,V_{10}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{10},E_4,V_{11},E_3,V_{10}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{11},E_4,V_8,E_3,V_{11}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{11},E_4,V_9,E_3,V_{11}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{11},E_4,V_{10},E_3,V_{11}\}.
\end{aligned}$$

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{15},E_4,V_{17},E_5,V_{15}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}=\{V_{17},E_4,V_{15},E_5,V_{17}\}.
\end{aligned}$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_{23}, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_{10}, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{10}, E_3, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$$
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$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
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$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_8, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_9, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_8, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_{23}, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$$
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$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$$
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$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_8, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_9, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_4, V_{11}, E_3, V_{10}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_8, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_9, E_3, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{10}, V_9\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_{11}, V_9\}.$$
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$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, V_{11}, V_{10}\}.$$
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$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
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$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_{23}, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_9, E_4, V_8\}.$$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{10}, E_4, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_3, V_{11}, E_4, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_8, E_4, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{10}, E_4, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_3, V_{11}, E_4, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_8, E_4, V_{10}\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_9, E_4, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{10}, E_3, V_{11}, E_4, V_{10}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_8, E_4, V_{11}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_3, V_9, E_4, V_{11}\}.$
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$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_9, E_3, V_8\}.$
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$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, E_4, V_{11}, E_3, V_8\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_8, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{10}, E_3, V_9\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, E_4, V_{11}, E_3, V_9\}.$
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$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, E_4, V_{10}, E_3, V_{11}\}.$

$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_4, V_{17}, E_5, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_4, V_{15}, E_5, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15}, E_5, V_{17}, E_4, V_{15}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, E_5, V_{15}, E_4, V_{17}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_{23}, E_2, V_1\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_1, V_2, E_2, V_{23}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_2, V_{23}, E_1, V_1\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, E_2, V_1, E_1, V_{23}\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 32^2.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_9, V_8\}.$
$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{10}, V_8\}.$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_8, V_{11}, V_8\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_9, V_8, V_9\}.$$
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$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_9, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{11}, V_{10}, V_{11}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{15} V_{17}, V_{15}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{17}, V_{15}, V_{17}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_{23}, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_{23}, V_1, V_{23}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 16z^3.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.

- On the Figure (8.19), the SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive sequence of the Extreme SuperHyperVertices and the Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities isn't up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only less than **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Does has less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s** **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = 0.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.

- On the Figure (8.20), the SuperHyperNotion, namely, SuperHyperConnectivities, is up.

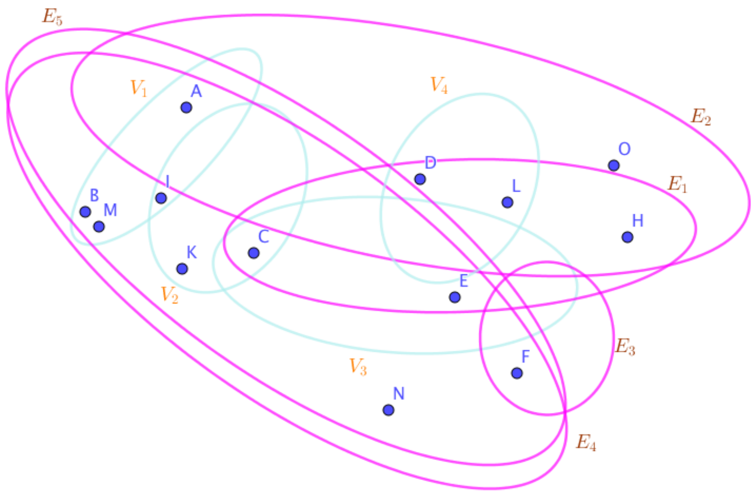


Figure 8.4: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

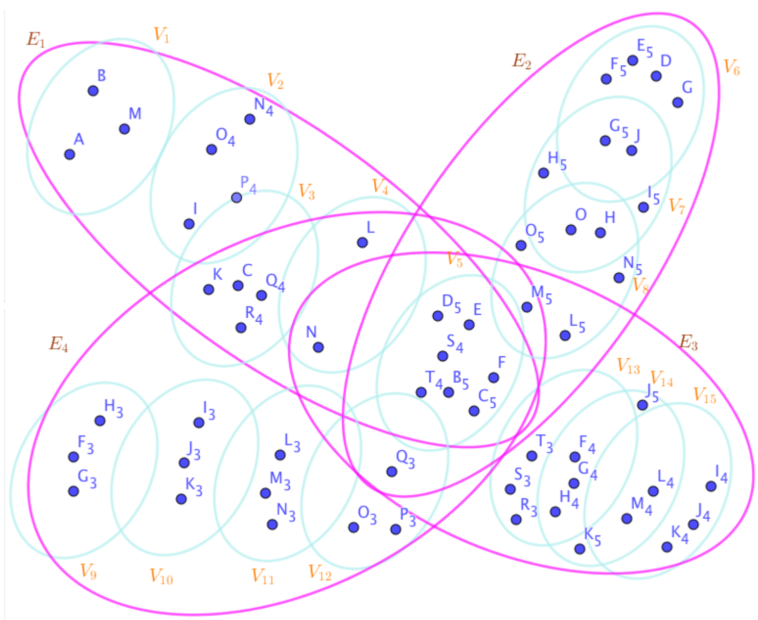


Figure 8.5: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

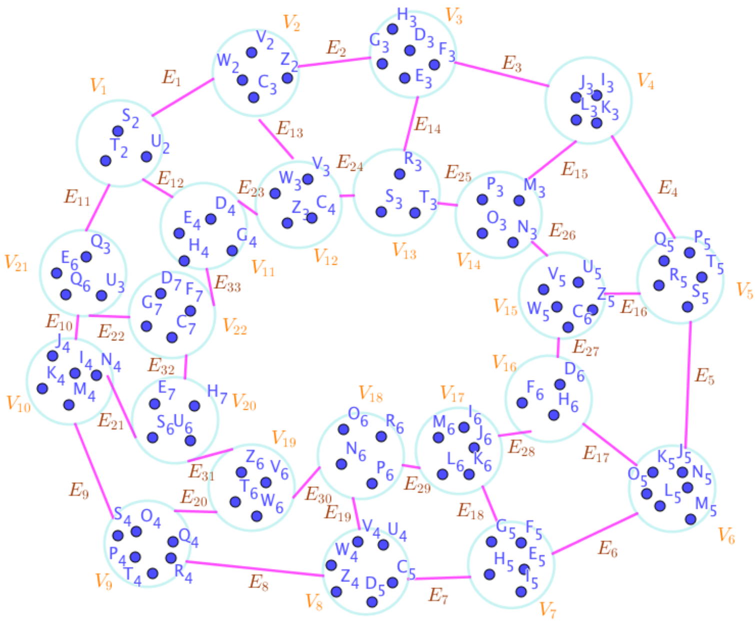


Figure 8.6: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

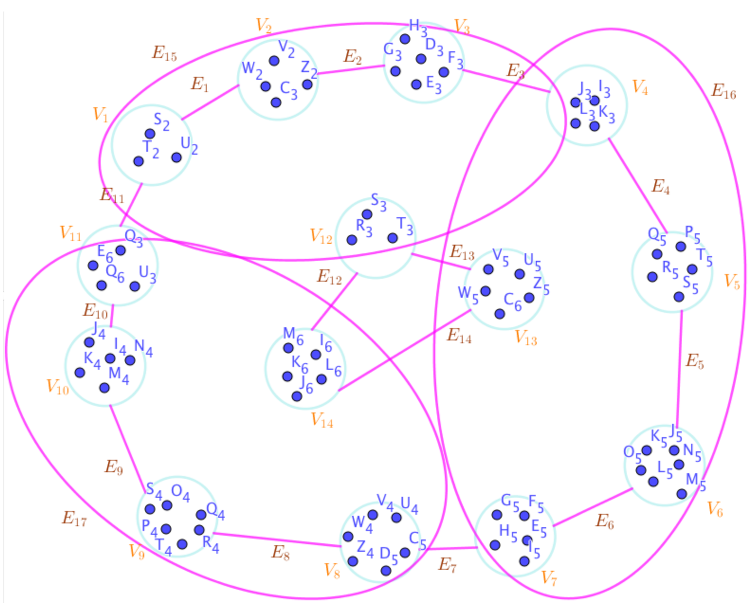


Figure 8.7: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

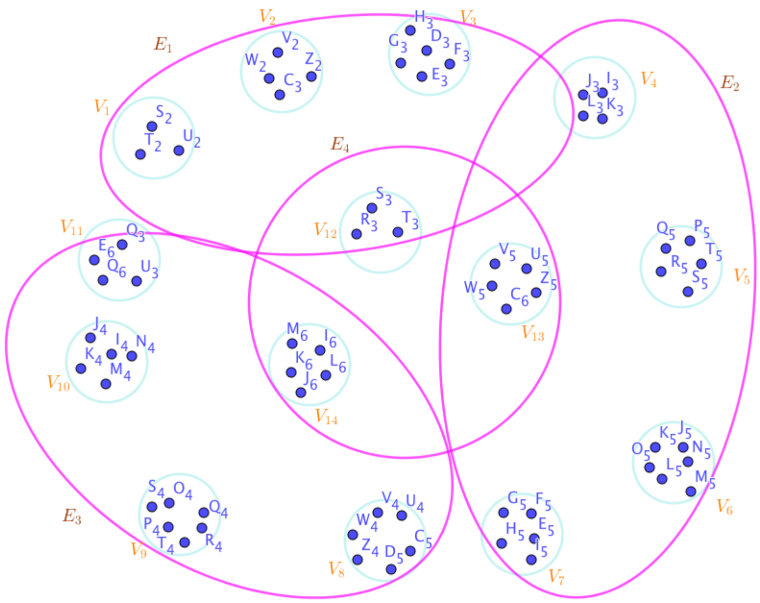


Figure 8.8: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

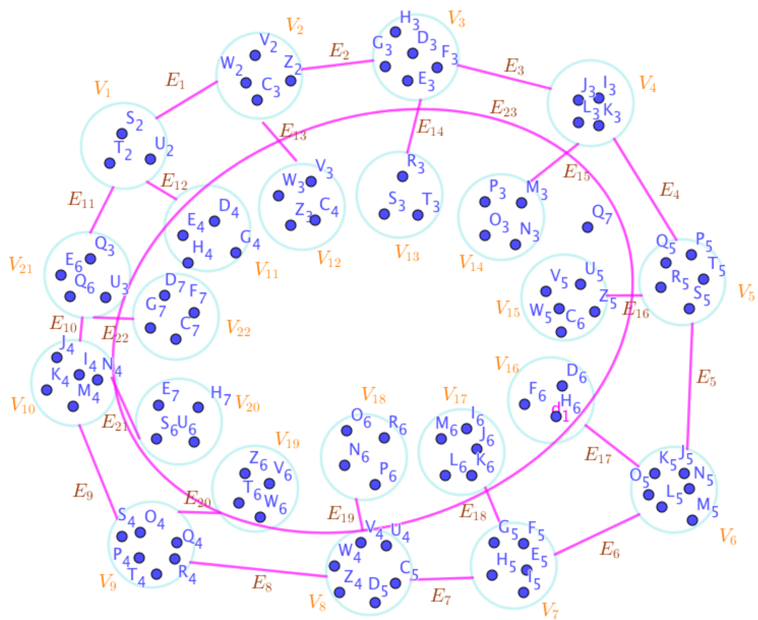


Figure 8.9: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

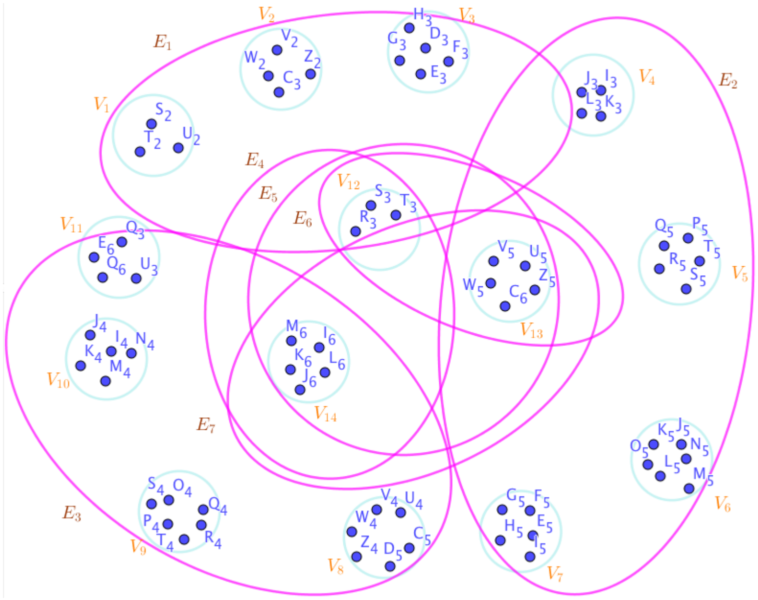


Figure 8.10: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

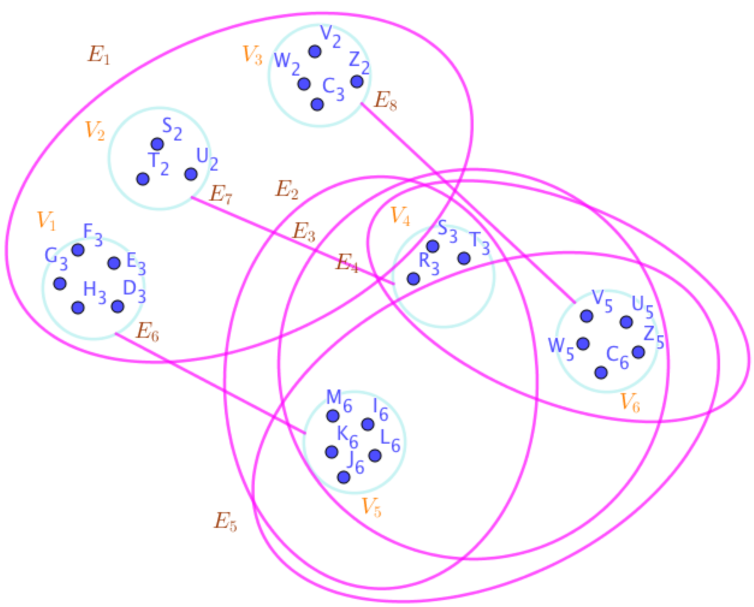


Figure 8.11: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

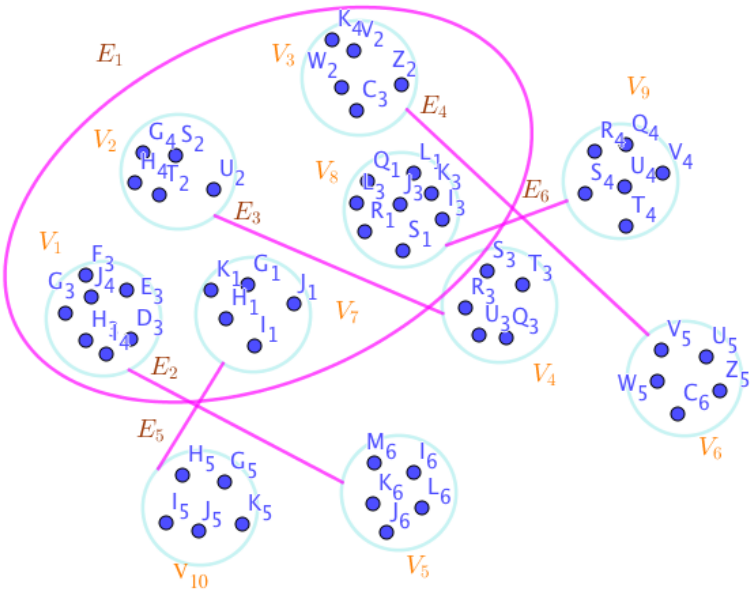


Figure 8.12: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

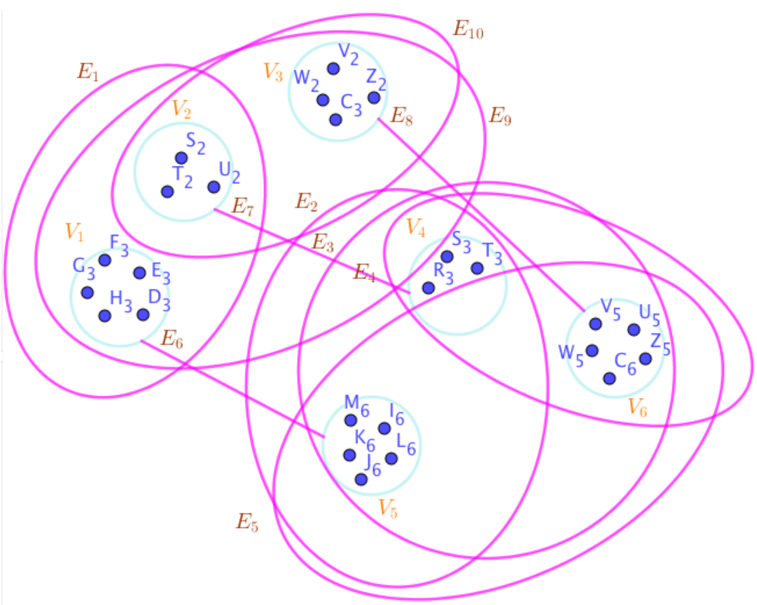


Figure 8.13: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

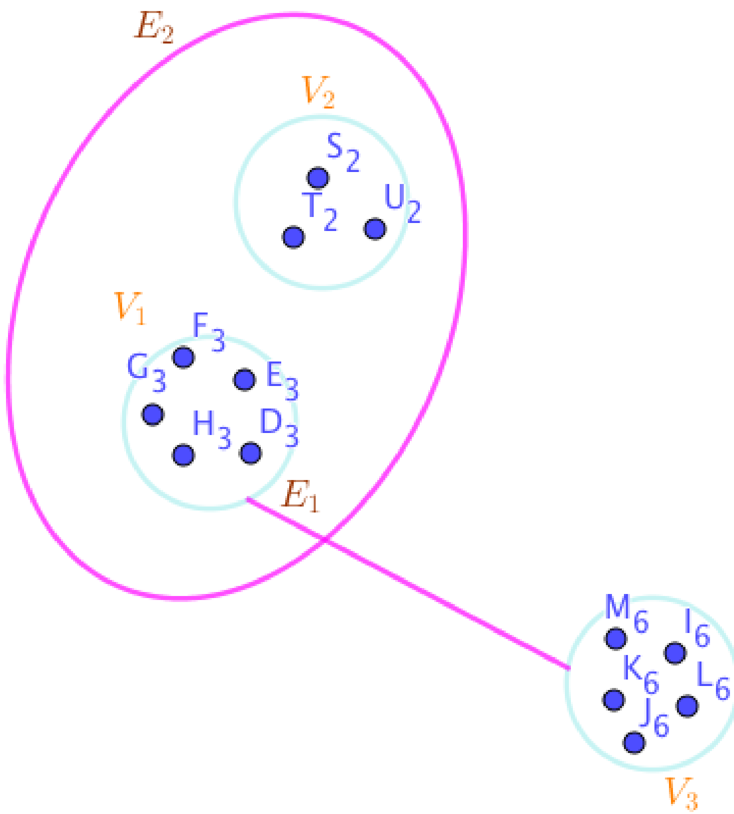


Figure 8.14: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

Proposition 8.0.2. *Assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Then in the worst case, literally,*

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

Is an Extreme type-result-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme type-result-SuperHyperConnectivities is the cardinality of

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$

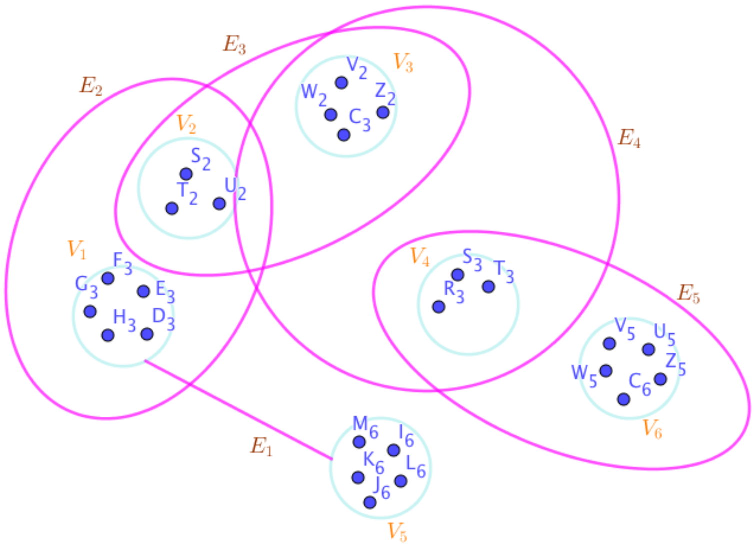


Figure 8.15: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

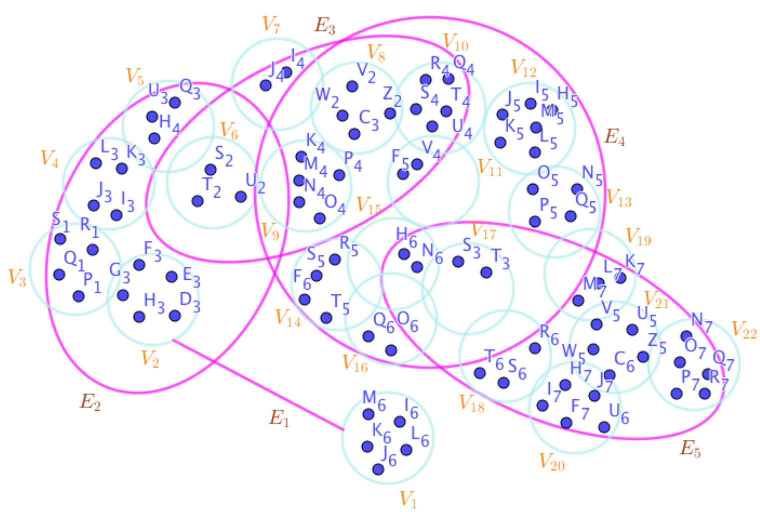


Figure 8.16: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

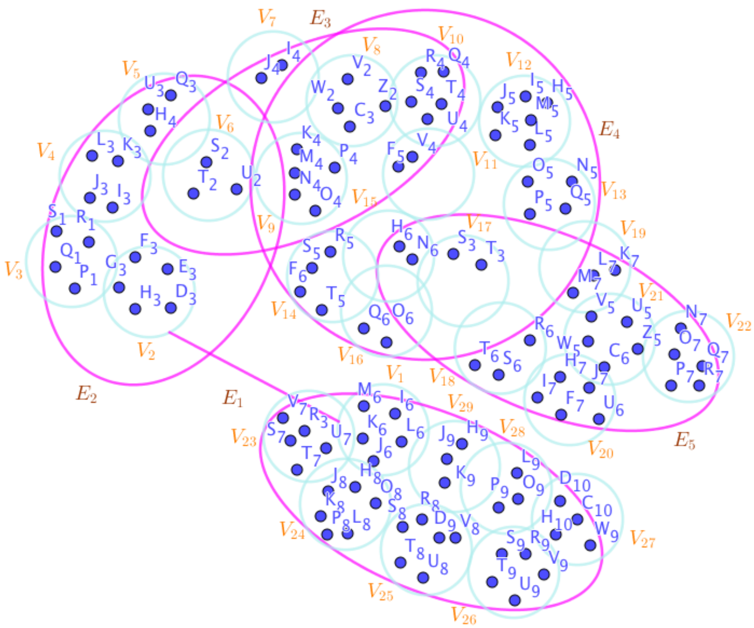


Figure 8.17: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

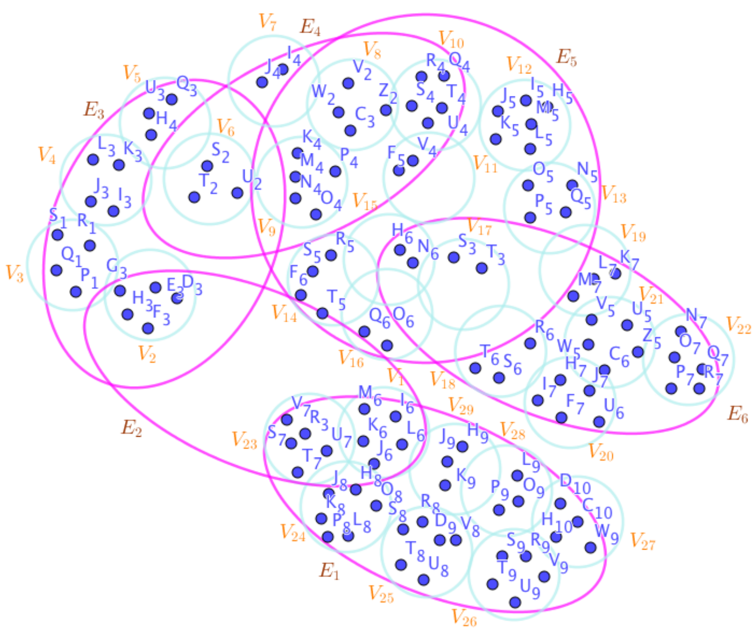


Figure 8.18: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

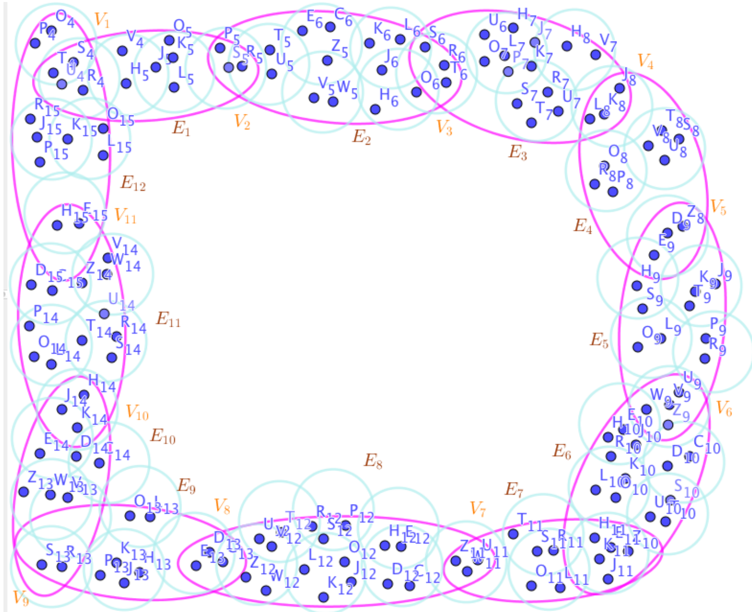


Figure 8.19: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

Proof. Assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The SuperHyperSet of the SuperHyperVertices $V \setminus V \setminus \{V_1, V_2, V_3, V_4, V_1\}$ isn't an Extreme quasi-type-result-SuperHyperConnectivities since neither Extreme amount of Extreme SuperHyperEdges nor Extreme amount of Extreme SuperHyperVertices where Extreme amount refers to the Extreme number of Extreme SuperHyperVertices(-/SuperHyperEdges) more than one to form any Extreme kind of Extreme consecutive consequence as the Extreme icon and Extreme generator of the Extreme SuperHyperConnectivities in the terms of the Extreme longest form. Let us consider the Extreme SuperHyperSet

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

This Extreme SuperHyperSet of the Extreme SuperHyperVertices has the eligibilities to propose property such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities but the maximum Extreme cardinality indicates that these Extreme type-SuperHyperSets couldn't give us the Extreme

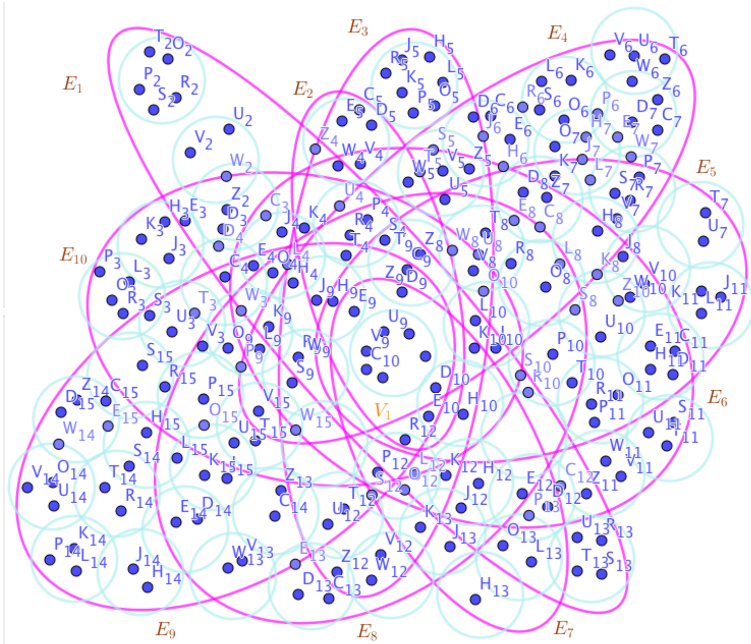


Figure 8.20: The SuperHyperGraphs Associated to the Notions of SuperHyperConnectivities in the Example (8.0.1)

lower bound in the term of Extreme sharpness. In other words, the Extreme SuperHyperSet

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

Of the Extreme SuperHyperVertices implies at least on-quasi-triangle style is up but sometimes the Extreme SuperHyperSet

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

Of the Extreme SuperHyperVertices is free-quasi-triangle and it doesn't make a contradiction to the supposition on the connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Thus the minimum case never happens in the generality of the connected loopless Neutrosophic SuperHyperGraphs. Thus if we assume in the worst case, literally,

$$V \setminus V \setminus \{V_1, V_2, V_3, V_4, V_1\}$$

Is an Extreme quasi-type-result-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the Extreme cardinality, of an Extreme Extreme quasi-type-result-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{V_1, V_2, V_3, V_4, V_1\}.$$

Then we've lost some connected loopless Extreme SuperHyperClasses of the connected loopless Neutrosophic SuperHyperGraphs titled free-triangle, on-triangle, and their quasi-types but the Extreme quasi-type-result-SuperHyperConnectivities is only up in this Extreme quasi-type-result-SuperHyperConnectivities. It's the contradiction to that fact on the Extreme generality. There are some counterexamples to deny this statement. One of them comes from the setting of the graph titled path and star as the counterexamples-classes or reversely direction cycle as the examples-classes, are well-known classes in that setting and they could be considered as the examples-classes and counterexamples-classes for the tight bound of

$$V \setminus V \setminus \{V_1, V_2, V_3, V_4, V_1\}.$$

Let $V \setminus V \setminus \{z, z'\}$ in mind. There's no Extreme necessity on the Extreme SuperHyperEdge since we need at least three Extreme SuperHyperVertices to form an Extreme SuperHyperEdge. It doesn't withdraw the Extreme principles of the main Extreme definition since there's no Extreme condition to be satisfied but the Extreme condition is on the Extreme existence of the Extreme SuperHyperEdge instead of acting on the Extreme SuperHyperVertices. In other words, if there are three Extreme SuperHyperEdges, then the Extreme SuperHyperSet has the necessary condition for the intended Extreme definition to be Extremely applied. Thus the $V \setminus V \setminus \{z, z'\}$ is withdrawn not by the Extreme conditions of the main Extreme definition but by the Extreme necessity of the Extreme pre-condition on the Extreme usage of the main Extreme definition.
To make sense with the precise Extreme words in the terms of "R-', the follow-up Extreme illustrations are Extremely coming up.
The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_{E'}, c_{E''}, c_{E'''}\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_{E'}, c_{E''}, c_{E'''}\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_{E'}, c_{E''}, c_{E'''}\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the

Extreme SuperHyperConnectivities, instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_{E'}, c_{E''}, c_{E'''}\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There are not only **four** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **four** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_{E'}, c_{E''}, c_{E'''}\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Doesn't have less than four SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far four Extreme SuperHyperEdges. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **isn't** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_{E'}, c_{E''}, c_{E'''}\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Isn't the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

SuperHyperConnectivities $\mathcal{C}(ESHG)$ for a Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices[SuperHyperEdges] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s** **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's only one Extreme consecutive Extreme sequence of Extreme SuperHyperVertices and Extreme SuperHyperEdges form only one Extreme SuperHyperConnectivities. There are not only less than four Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, is not:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

Does includes only less than four SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only simple Extreme type-SuperHyperSet called the

“Extreme SuperHyperConnectivities”

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme girth embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_{E'}, c_{E''}, c_{E'''}\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Then in the worst case, literally,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

Is an Extreme type-result-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme type-result-SuperHyperConnectivities is the cardinality of

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, E_1, V_2, E_2, V_3, E_3, V_4, E_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^4.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities} = \{V_1, V_2, V_3, V_4, V_1\}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^5.$$

■

Proposition 8.0.3. *Assume a simple Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Then the Extreme number of type-result-R-SuperHyperConnectivities has, the least Extreme cardinality, the lower sharp Extreme bound for Extreme cardinality, is the Extreme cardinality of*

$$V \setminus V \setminus \{a_E, b_{E'}, c_{E''}, c_{E'''}\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

If there's an Extreme type-result-R-SuperHyperConnectivities with the least Extreme cardinality, the lower sharp Extreme bound for cardinality.

Proof. The Extreme structure of the Extreme type-result-R-SuperHyperConnectivities decorates the Extreme SuperHyperVertices don't have received any Extreme connections so as this Extreme style implies different versions of Extreme SuperHyperEdges with the maximum Extreme cardinality in the terms of Extreme SuperHyperVertices are spotlight. The lower Extreme bound is to have the maximum Extreme groups of Extreme SuperHyperVertices have perfect Extreme connections inside each of SuperHyperEdges and the outside of this Extreme SuperHyperSet doesn't matter but regarding the connectedness of the used Neutrosophic SuperHyperGraph arising from its Extreme properties taken from the fact that it's simple. If there's no more than one Extreme SuperHyperVertex in the targeted Extreme SuperHyperSet, then there's no Extreme connection. Furthermore, the Extreme existence of one Extreme SuperHyperVertex has no Extreme effect to talk about the Extreme R-SuperHyperConnectivities. Since at least two Extreme SuperHyperVertices involve to make a title in the Extreme background of the Neutrosophic SuperHyperGraph. The Neutrosophic SuperHyperGraph is obvious if it has no Extreme SuperHyperEdge but at least two Extreme SuperHyperVertices make the Extreme version of Extreme SuperHyperEdge. Thus in the Extreme setting of non-obvious Neutrosophic SuperHyperGraph, there are at least one Extreme SuperHyperEdge. It's necessary to mention that the word "Simple" is used as Extreme adjective for the initial Neutrosophic SuperHyperGraph, induces there's no Extreme appearance of the loop Extreme version of the Extreme SuperHyperEdge and this Neutrosophic SuperHyperGraph is said to be loopless. The Extreme adjective "loop" on the basic Extreme framework engages one Extreme SuperHyperVertex but it never happens in this Extreme setting. With these Extreme bases, on a Neutrosophic SuperHyperGraph, there's at least one Extreme SuperHyperEdge thus there's at least an Extreme R-SuperHyperConnectivities has the Extreme cardinality of an Extreme SuperHyperEdge. Thus, an Extreme R-SuperHyperConnectivities has the Extreme cardinality at least an Extreme SuperHyperEdge. Assume an Extreme SuperHyperSet $V \setminus V \setminus \{z\}$. This Extreme SuperHyperSet isn't an Extreme R-SuperHyperConnectivities since either the Neutrosophic SuperHyperGraph is an obvious Extreme SuperHyperModel thus it never happens since there's no Extreme usage of this Extreme framework and even more there's no Extreme connection inside or the Neutrosophic SuperHyperGraph isn't obvious and as its consequences, there's an Extreme contradiction with the term "Extreme R-SuperHyperConnectivities" since the maximum Extreme cardinality never happens for this Extreme style of the Extreme SuperHyperSet and beyond that there's no Extreme connection inside as mentioned in first Extreme case in the forms of drawback for this selected Extreme SuperHyperSet. Let

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Comes up. This Extreme case implies having the Extreme style of on-quasi-triangle Extreme style on the every Extreme elements of this Extreme SuperHyperSet. Precisely, the Extreme R-SuperHyperConnectivities is the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that some Extreme amount of the Extreme SuperHyperVertices are on-quasi-triangle Extreme style. The Extreme cardinality of the v SuperHypeSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Is the maximum in comparison to the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But the lower Extreme bound is up. Thus the minimum Extreme cardinality of the maximum Extreme cardinality ends up the Extreme discussion. The first Extreme term refers to the Extreme setting of the Neutrosophic SuperHyperGraph but this key point is enough since there's an Extreme SuperHyperClass of a Neutrosophic SuperHyperGraph has no on-quasi-triangle Extreme style amid some amount of its Extreme SuperHyperVertices. This Extreme setting of the Extreme SuperHyperModel proposes an Extreme SuperHyperSet has only some amount Extreme SuperHyperVertices from one Extreme SuperHyperEdge such that there's no Extreme amount of Extreme SuperHyperEdges more than one involving these some amount of these Extreme SuperHyperVertices. The Extreme cardinality of this Extreme SuperHyperSet is the maximum and the Extreme case is occurred in the minimum Extreme situation. To sum them up, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Has the maximum Extreme cardinality such that

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Contains some Extreme SuperHyperVertices such that there's distinct-covers-order-amount Extreme SuperHyperEdges for amount of Extreme SuperHyperVertices taken from the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

It means that the Extreme SuperHyperSet of the Extreme SuperHyperVertices

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an Extreme R-SuperHyperConnectivities for the Neutrosophic SuperHyperGraph as used Extreme background in the Extreme terms of worst Extreme case and the common theme of the lower Extreme bound occurred in the specific Extreme SuperHyperClasses of the Neutrosophic SuperHyperGraphs which are Extreme free-quasi-triangle.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$.
To sum them up, assume a simple Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Then the Extreme number of R-SuperHyperConnectivities has, the least cardinality, the lower sharp bound for cardinality, is the Extreme cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

If there's a R-SuperHyperConnectivities with the least cardinality, the lower sharp bound for cardinality. ∎

Proposition 8.0.4. *Assume a connected Extreme SuperHyperGraph $ESHG:(V,E)$. If an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme SuperHyperVertices, then the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least*

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

It's straightforward that the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least the maximum Extreme number of Extreme SuperHyperVertices of the Extreme SuperHyperEdges with the maximum number of the Extreme SuperHyperEdges. In other words, the maximum number of the Extreme SuperHyperEdges contains the maximum Extreme number of Extreme SuperHyperVertices are renamed to Extreme SuperHyperConnectivities in some cases but the maximum number of the Extreme SuperHyperEdge with the maximum Extreme number of Extreme SuperHyperVertices, has the Extreme SuperHyperVertices are contained in an Extreme R-SuperHyperConnectivities.

Proof. Assume an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme number of the Extreme SuperHyperVertices. Then every Extreme SuperHyperVertex has at least no Extreme SuperHyperEdge with others in common. Thus those Extreme SuperHyperVertices have the eligibles to be contained in an Extreme R-SuperHyperConnectivities. Those Extreme SuperHyperVertices are potentially included in an Extreme style-R-SuperHyperConnectivities. Formally, consider

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

Are the Extreme SuperHyperVertices of an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus

$$Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z.$$

where the $\sim$ isn't an equivalence relation but only the symmetric relation on the Extreme SuperHyperVertices of the Neutrosophic SuperHyperGraph. The formal definition is as follows.

$$Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z$$

if and only if Z_i and Z_j are the Extreme SuperHyperVertices and there's only and only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ between the Extreme SuperHyperVertices Z_i and Z_j. The other definition for the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ in the terms of Extreme R-SuperHyperConnectivities is

$$\{a_E, b_E, c_E, \ldots, z_E\}.$$

This definition coincides with the definition of the Extreme R-SuperHyperConnectivities but with slightly differences in the maximum Extreme cardinality amid those Extreme type-SuperHyperSets of the Extreme SuperHyperVertices. Thus the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$\max_z |\{Z_1, Z_2, \ldots, Z_z \mid Z_i \sim Z_j,\ i \neq j,\ i, j = 1, 2, \ldots, z\}|_{\text{Extreme cardinality}},$$

and

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is formalized with mathematical literatures on the Extreme R-SuperHyperConnectivities. Let $Z_i \overset{E}{\sim} Z_j$, be defined as Z_i and Z_j are the Extreme SuperHyperVertices belong to the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus,

$$E = \{Z_1, Z_2, \ldots, Z_z \mid Z_i \overset{E}{\sim} Z_j,\ i \neq j,\ i, j = 1, 2, \ldots, z\}.$$

Or

$$\{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But with the slightly differences,

$$\text{Extreme R-SuperHyperConnectivities} =$$
$$\{Z_1, Z_2, \ldots, Z_z \mid \forall i \neq j,\ i, j = 1, 2, \ldots, z,\ \exists E_x,\ Z_i \overset{E_x}{\sim} Z_j, \}.$$

$$\text{Extreme R-SuperHyperConnectivities} =$$
$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus $E \in E_{ESHG:(V,E)}$ is an Extreme quasi-R-SuperHyperConnectivities where $E \in E_{ESHG:(V,E)}$ is fixed that means $E_x = E \in E_{ESHG:(V,E)}$. for all Extreme intended SuperHyperVertices but in an Extreme SuperHyperConnectivities, $E_x = E \in E_{ESHG:(V,E)}$ could be different and it's not unique. To sum them up, in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. If an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme SuperHyperVertices, then the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

It's straightforward that the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least the maximum Extreme number of Extreme SuperHyperVertices of the Extreme SuperHyperEdges with the maximum number of the Extreme SuperHyperEdges. In other words, the maximum number of the Extreme SuperHyperEdges contains the maximum Extreme number of Extreme SuperHyperVertices are renamed to Extreme SuperHyperConnectivities in some cases but the maximum number of the Extreme SuperHyperEdge with the maximum Extreme number of Extreme SuperHyperVertices, has the Extreme SuperHyperVertices are contained in an Extreme R-SuperHyperConnectivities.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s** **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. If an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme SuperHyperVertices, then the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

It's straightforward that the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least the maximum Extreme number of Extreme SuperHyperVertices of the Extreme SuperHyperEdges with the maximum number of the Extreme SuperHyperEdges. In other words, the maximum number of the Extreme SuperHyperEdges contains the maximum Extreme number of Extreme SuperHyperVertices are renamed to Extreme SuperHyperConnectivities in some cases but the maximum number of the Extreme SuperHyperEdge with the maximum Extreme number of Extreme SuperHyperVertices, has the Extreme SuperHyperVertices are contained in an Extreme R-SuperHyperConnectivities. ■

Proposition 8.0.5. *Assume a connected non-obvious Extreme SuperHyperGraph $ESHG : (V, E)$. There's only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only the maximum possibilities of the distinct interior Extreme SuperHyperVertices inside of any given Extreme quasi-R-SuperHyperConnectivities minus all Extreme SuperHypeNeighbor to some of them but not all of them. In other words, there's only an unique Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only two distinct Extreme SuperHyperVertices in an Extreme quasi-R-SuperHyperConnectivities, minus all Extreme SuperHypeNeighbor to some of them but not all of them.*

Proof. The obvious SuperHyperGraph has no Extreme SuperHyperEdges. But the non-obvious Extreme SuperHyperModel is up. The quasi-SuperHyperModel addresses some issues about the Extreme optimal SuperHyperObject. It specially delivers some remarks on the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that there's distinct amount of Extreme SuperHyperEdges for distinct amount of Extreme SuperHyperVertices up to all taken from that Extreme SuperHyperSet of the Extreme SuperHyperVertices but this Extreme SuperHyperSet of the Extreme SuperHyperVertices is either has the maximum Extreme SuperHyperCardinality or it doesn't have maximum Extreme SuperHyperCardinality. In a non-obvious SuperHyperModel, there's at least one Extreme SuperHyperEdge containing at least all Extreme SuperHyperVertices. Thus it forms an Extreme quasi-R-SuperHyperConnectivities where the Extreme completion of the Extreme incidence is up in that. Thus it's, literarily, an Extreme embedded R-SuperHyperConnectivities. The SuperHyperNotions of embedded SuperHyperSet and quasi-SuperHyperSet coincide. In the original setting, these types of SuperHyperSets only don't satisfy on the maximum SuperHyperCardinality. Thus the embedded setting is elected such that those SuperHyperSets have the maximum Extreme SuperHyperCardinality and they're Extreme SuperHyperOptimal. The less than two distinct types of Extreme SuperHyperVertices are included in the minimum Extreme style of the embedded Extreme R-SuperHyperConnectivities. The interior types of the Extreme SuperHyperVertices are deciders. Since the Extreme number of SuperHyperNeighbors are only affected by the interior Extreme SuperHyperVertices. The common connections, more precise and more formal, the perfect unique connections inside the Extreme SuperHyperSet for any distinct types of Extreme SuperHyperVertices pose the Extreme R-SuperHyperConnectivities. Thus Extreme exterior SuperHyperVertices could be used only in one Extreme SuperHyperEdge and in Extreme SuperHyperRelation with the interior Extreme SuperHyperVertices in that Extreme SuperHyperEdge. In the embedded Extreme

SuperHyperConnectivities, there's the usage of exterior Extreme SuperHyperVertices since they've more connections inside more than outside. Thus the title "exterior" is more relevant than the title "interior". One Extreme SuperHyperVertex has no connection, inside. Thus, the Extreme SuperHyperSet of the Extreme SuperHyperVertices with one SuperHyperElement has been ignored in the exploring to lead on the optimal case implying the Extreme R-SuperHyperConnectivities. The Extreme R-SuperHyperConnectivities with the exclusion of the exclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge and with other terms, the Extreme R-SuperHyperConnectivities with the inclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge, is an Extreme quasi-R-SuperHyperConnectivities. To sum them up, in a connected non-obvious Extreme SuperHyperGraph $ESHG : (V, E)$. There's only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only the maximum possibilities of the distinct interior Extreme SuperHyperVertices inside of any given Extreme quasi-R-SuperHyperConnectivities minus all Extreme SuperHypeNeighbor to some of them but not all of them. In other words, there's only an unique Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only two distinct Extreme SuperHyperVertices in an Extreme quasi-R-SuperHyperConnectivities, minus all Extreme SuperHypeNeighbor to some of them but not all of them.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, in a connected non-obvious Extreme SuperHyperGraph $ESHG:(V,E)$. There's only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only the maximum possibilities of the distinct interior Extreme SuperHyperVertices inside of any given Extreme quasi-R-SuperHyperConnectivities minus all Extreme SuperHypeNeighbor to some of them but not all of them. In other words, there's only an unique Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only two distinct Extreme SuperHyperVertices in an Extreme quasi-R-SuperHyperConnectivities, minus all Extreme SuperHypeNeighbor to some of them but not all of them. ∎

Proposition 8.0.6. *Assume a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.*

Proof. The main definition of the Extreme R-SuperHyperConnectivities has two titles. an Extreme quasi-R-SuperHyperConnectivities and its corresponded quasi-maximum Extreme R-SuperHyperCardinality are two titles in the terms of quasi-R-styles. For any Extreme number, there's an Extreme quasi-R-SuperHyperConnectivities with that quasi-maximum Extreme SuperHyperCardinality in the terms of the embedded Neutrosophic SuperHyperGraph. If there's an embedded Neutrosophic SuperHyperGraph, then the Extreme quasi-SuperHyperNotions lead us to take the collection of all the Extreme quasi-R-SuperHyperConnectivitiess for all Extreme numbers less than its Extreme corresponded maximum number. The essence of the Extreme SuperHyperConnectivities ends up but this essence starts up in the terms of the Extreme quasi-R-SuperHyperConnectivities,

again and more in the operations of collecting all the Extreme quasi-R-SuperHyperConnectivitiess acted on the all possible used formations of the Neutrosophic SuperHyperGraph to achieve one Extreme number. This Extreme number is
considered as the equivalence class for all corresponded quasi-R-SuperHyperConnectivitiess. Let $z_{\text{Extreme Number}}$, $S_{\text{Extreme SuperHyperSet}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperSet and an Extreme SuperHyperConnectivities. Then

$$
\begin{aligned}
&[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \{S_{\text{Extreme SuperHyperSet}} \mid \\
&S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= z_{\text{Extreme Number}}\}.
\end{aligned}
$$

As its consequences, the formal definition of the Extreme SuperHyperConnectivities is re-formalized and redefined as follows.

$$
\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \\
&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid \\
&S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= z_{\text{Extreme Number}}\}.
\end{aligned}
$$

To get more precise perceptions, the follow-up expressions propose another formal technical definition for the Extreme SuperHyperConnectivities.

$$
\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \\
&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid \\
&S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= z_{\text{Extreme Number}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.
\end{aligned}
$$

In more concise and more convenient ways, the modified definition for the Extreme SuperHyperConnectivities poses the upcoming expressions.

$$
\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.
\end{aligned}
$$

To translate the statement to this mathematical literature, the formulae will be revised.

$$
G_{\text{Extreme SuperHyperConnectivities}} =
$$

$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

And then,

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

To get more visions in the closer look-up, there's an overall overlook.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid$$
$$S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}},$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid$$
$$S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}},$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= z_{\text{Extreme Number}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

Now, the extension of these types of approaches is up. Since the new term, "Extreme SuperHyperNeighborhood", could be redefined as the collection of the Extreme SuperHyperVertices such that any amount of its Extreme SuperHyperVertices are incident to an Extreme SuperHyperEdge. It's, literarily, another name for "Extreme Quasi-SuperHyperConnectivities" but, precisely, it's the generalization of "Extreme Quasi-SuperHyperConnectivities" since "Extreme Quasi-SuperHyperConnectivities" happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and background but "Extreme SuperHyperNeighborhood" may not happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and preliminarily background since there are some ambiguities about the Extreme SuperHyperCardinality arise from it. To get orderly keywords, the terms, "Extreme SuperHyperNeighborhood", "Extreme Quasi-SuperHyperConnectivities", and "Extreme SuperHyperConnectivities" are up.
Thus, let $z_{\text{Extreme Number}}, N_{\text{Extreme SuperHyperNeighborhood}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperNeighborhood and an Extreme SuperHyperConnectivities and the new terms are up.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= z_{\text{Extreme Number}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

And with go back to initial structure,

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$

$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max\big\{|E| \mid E \in E_{ESHG:(V,E)}\big\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= z_{\text{Extreme Number}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max\big\{|E| \mid E \in E_{ESHG:(V,E)}\big\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}$$
$$= \max\big\{|E| \mid E \in E_{ESHG:(V,E)}\big\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\big\{|E| \mid E \in E_{ESHG:(V,E)}\big\}\}.$$

Thus, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\big\{E \in E_{ESHG:(V,E)} \mid |E|=\max\big\{|E| \mid E \in E_{ESHG:(V,E)}\big\}\big\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\big\{E \in E_{ESHG:(V,E)} \mid |E|=\max\big\{|E| \mid E \in E_{ESHG:(V,E)}\big\}\big\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\big\{E \in E_{ESHG:(V,E)} \mid |E|=\max\big\{|E| \mid E \in E_{ESHG:(V,E)}\big\}\big\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them. ■

Proposition 8.0.7. *Assume a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Any Extreme R-SuperHyperConnectivities only contains all interior Extreme SuperHyperVertices and all exterior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdge where there's any of them has all possible Extreme SuperHyperNeighbors in and there's all Extreme SuperHyperNeighborhoods in with no exception minus all Extreme SuperHypeNeighbors to some of them not all of them but everything is possible about Extreme SuperHyperNeighborhoods and Extreme SuperHyperNeighbors out.*

Proof. Assume a connected Extreme SuperHyperGraph $ESHG : (V, E)$. Let an Extreme SuperHyperEdge $ESHE : E \in E_{ESHG:(V,E)}$ has some Extreme SuperHyperVertices r. Consider all Extreme numbers of those Extreme SuperHyperVertices from that Extreme SuperHyperEdge excluding excluding more than r distinct Extreme SuperHyperVertices, exclude to any given Extreme SuperHyperSet of the Extreme SuperHyperVertices. Consider there's an Extreme R-SuperHyperConnectivities with the least cardinality, the lower sharp Extreme bound for Extreme cardinality. Assume a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE} \setminus \{z\}$ is an Extreme SuperHyperSet S of the Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely but it isn't an Extreme R-SuperHyperConnectivities. Since it doesn't have **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some SuperHyperVertices uniquely. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE} \cup \{z\}$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of Extreme SuperHyperVertices but it isn't an Extreme R-SuperHyperConnectivities. Since it **doesn't do** the Extreme procedure such that such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely [there are at least one Extreme SuperHyperVertex outside implying there's, sometimes in the connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$, an Extreme SuperHyperVertex, titled its Extreme SuperHyperNeighbor, to that Extreme SuperHyperVertex in the Extreme SuperHyperSet S so as S doesn't do "the Extreme procedure".]. There's only **one** Extreme SuperHyperVertex **outside** the intended Extreme SuperHyperSet, $V_{ESHE} \cup \{z\}$, in the terms of Extreme SuperHyperNeighborhood. Thus the obvious Extreme R-SuperHyperConnectivities, V_{ESHE} is up. The obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities, V_{ESHE}, **is** an Extreme SuperHyperSet, V_{ESHE}, **includes** only **all** Extreme SuperHyperVertices does forms any kind of Extreme pairs are titled Extreme SuperHyperNeighbors in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices V_{ESHE}, is the **maximum Extreme SuperHyperCardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices **such that** there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely. Thus, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Any Extreme R-SuperHyperConnectivities only contains all interior Extreme SuperHyperVertices and all exterior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdge where there's any of them has all possible Extreme SuperHyperNeighbors in and there's all Extreme SuperHyperNeighborhoods in with no exception minus all Extreme SuperHypeNeighbors to some of them not all of them but everything is possible about Extreme SuperHyperNeighborhoods and Extreme SuperHyperNeighbors out.

To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG:(V,E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, assume a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Any Extreme R-SuperHyperConnectivities only contains all interior Extreme SuperHyperVertices and all exterior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdge where there's any of them has all possible Extreme SuperHyperNeighbors in and there's all Extreme SuperHyperNeighborhoods in with no exception minus all Extreme SuperHypeNeighbors to some of them not all of them but everything is possible about Extreme SuperHyperNeighborhoods and Extreme SuperHyperNeighbors out. ∎

Remark 8.0.8. The words " Extreme SuperHyperConnectivities" and "Extreme SuperHyperDominating" both refer to the maximum Extreme type-style. In other words, they refer to the maximum Extreme SuperHyperNumber and the Extreme SuperHyperSet with the maximum Extreme SuperHyperCardinality.

Proposition 8.0.9. *Assume a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Consider an Extreme SuperHyperDominating. Then an Extreme SuperHyperConnectivities has the members poses only one Extreme representative in an Extreme quasi-SuperHyperDominating.*

Proof. Assume a connected Extreme SuperHyperGraph $ESHG : (V, E)$. Consider an Extreme SuperHyperDominating. By applying the Proposition (8.0.7), the Extreme results are up. Thus on a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Consider an Extreme SuperHyperDominating. Then an Extreme SuperHyperConnectivities has the members poses only one Extreme representative in an Extreme quasi-SuperHyperDominating. ∎

CHAPTER 9

Results on Extreme SuperHyperClasses

The previous Extreme approaches apply on the upcoming Extreme results on Extreme SuperHyperClasses.

Proposition 9.0.1. *Assume a connected Extreme SuperHyperPath $ESHP : (V, E)$. Then an Extreme quasi-R-SuperHyperConnectivities-style with the maximum Extreme SuperHyperCardinality is an Extreme SuperHyperSet of the interior Extreme SuperHyperVertices.*

Proposition 9.0.2. *Assume a connected Extreme SuperHyperPath $ESHP : (V, E)$. Then an Extreme quasi-R-SuperHyperConnectivities is an Extreme SuperHyperSet of the interior Extreme SuperHyperVertices with only no Extreme exceptions in the form of interior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdges not excluding only any interior Extreme SuperHyperVertices from the Extreme unique SuperHyperEdges. an Extreme quasi-R-SuperHyperConnectivities has the Extreme number of all the interior Extreme SuperHyperVertices. Also,*

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{Extreme\ Cardinality}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{Extreme\ Cardinality}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Proof. Assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The SuperHyperSet of the SuperHyperVertices $V \setminus V \setminus \{z\}$ isn't a quasi-R-SuperHyperConnectivities since neither amount of Extreme SuperHyperEdges nor amount of SuperHyperVertices where amount refers to the Extreme number of SuperHyperVertices(-/SuperHyperEdges) more than one to form any kind of SuperHyperEdges or any number of SuperHyperEdges. Let us consider the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

This Extreme SuperHyperSet of the Extreme SuperHyperVertices has the eligibilities to propose property such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices but the maximum

Extreme cardinality indicates that these Extreme type-SuperHyperSets couldn't give us the Extreme lower bound in the term of Extreme sharpness. In other words, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices implies at least on-quasi-triangle style is up but sometimes the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices is free-quasi-triangle and it doesn't make a contradiction to the supposition on the connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Thus the minimum case never happens in the generality of the connected loopless Neutrosophic SuperHyperGraphs. Thus if we assume in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is a quasi-R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of a quasi-R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Then we've lost some connected loopless Extreme SuperHyperClasses of the connected loopless Neutrosophic SuperHyperGraphs titled free-triangle, on-triangle, and their quasi-types but the SuperHyperStable is only up in this quasi-R-SuperHyperConnectivities. It's the contradiction to that fact on the generality. There are some counterexamples to deny this statement. One of them comes from the setting of the graph titled path and cycle as the counterexamples-classes or reversely direction star as the examples-classes, are well-known classes in that setting and they could be considered as the examples-classes and counterexamples-classes for the tight bound of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Let $V \setminus V \setminus \{z\}$ in mind. There's no necessity on the SuperHyperEdge since we need at least two SuperHyperVertices to form a SuperHyperEdge. It doesn't withdraw the principles of the main definition since there's no condition to be satisfied but the condition is on the existence of the SuperHyperEdge instead of acting on the SuperHyperVertices. In other words, if there's a SuperHyperEdge, then the Extreme SuperHyperSet has the necessary condition for the intended definition to be applied. Thus the $V \setminus V \setminus \{z\}$ is withdrawn not by the conditions of the main definition but by the necessity of the pre-condition on the usage of the main definition.
The Extreme structure of the Extreme R-SuperHyperConnectivities decorates the Extreme SuperHyperVertices don't have received any Extreme connections so as this Extreme style implies different versions of Extreme SuperHyperEdges with the maximum Extreme cardinality in the terms of Extreme SuperHyperVertices are spotlight. The lower Extreme bound is to have the maximum Extreme groups of Extreme SuperHyperVertices have perfect Extreme connections inside each of SuperHyperEdges and the outside of this Extreme SuperHyperSet doesn't matter but regarding the connectedness of the used Neutrosophic SuperHyperGraph arising from its Extreme properties taken from the fact that it's simple. If there's no more than one Extreme

SuperHyperVertex in the targeted Extreme SuperHyperSet, then there's no Extreme connection. Furthermore, the Extreme existence of one Extreme SuperHyperVertex has no Extreme effect to talk about the Extreme R-SuperHyperConnectivities. Since at least two Extreme SuperHyperVertices involve to make a title in the Extreme background of the Neutrosophic SuperHyperGraph. The Neutrosophic SuperHyperGraph is obvious if it has no Extreme SuperHyperEdge but at least two Extreme SuperHyperVertices make the Extreme version of Extreme SuperHyperEdge. Thus in the Extreme setting of non-obvious Neutrosophic SuperHyperGraph, there are at least one Extreme SuperHyperEdge. It's necessary to mention that the word "Simple" is used as Extreme adjective for the initial Neutrosophic SuperHyperGraph, induces there's no Extreme appearance of the loop Extreme version of the Extreme SuperHyperEdge and this Neutrosophic SuperHyperGraph is said to be loopless. The Extreme adjective "loop" on the basic Extreme framework engages one Extreme SuperHyperVertex but it never happens in this Extreme setting. With these Extreme bases, on a Neutrosophic SuperHyperGraph, there's at least one Extreme SuperHyperEdge thus there's at least an Extreme R-SuperHyperConnectivities has the Extreme cardinality of an Extreme SuperHyperEdge. Thus, an Extreme R-SuperHyperConnectivities has the Extreme cardinality at least an Extreme SuperHyperEdge. Assume an Extreme SuperHyperSet $V \setminus V \setminus \{z\}$. This Extreme SuperHyperSet isn't an Extreme R-SuperHyperConnectivities since either the Neutrosophic SuperHyperGraph is an obvious Extreme SuperHyperModel thus it never happens since there's no Extreme usage of this Extreme framework and even more there's no Extreme connection inside or the Neutrosophic SuperHyperGraph isn't obvious and as its consequences, there's an Extreme contradiction with the term "Extreme R-SuperHyperConnectivities" since the maximum Extreme cardinality never happens for this Extreme style of the Extreme SuperHyperSet and beyond that there's no Extreme connection inside as mentioned in first Extreme case in the forms of drawback for this selected Extreme SuperHyperSet. Let

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Comes up. This Extreme case implies having the Extreme style of on-quasi-triangle Extreme style on the every Extreme elements of this Extreme SuperHyperSet. Precisely, the Extreme R-SuperHyperConnectivities is the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that some Extreme amount of the Extreme SuperHyperVertices are on-quasi-triangle Extreme style. The Extreme cardinality of the v SuperHypeSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Is the maximum in comparison to the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But the lower Extreme bound is up. Thus the minimum Extreme cardinality of the maximum Extreme cardinality ends up the Extreme discussion. The first Extreme term refers to the Extreme setting of the Neutrosophic SuperHyperGraph but this key point is enough since there's an Extreme SuperHyperClass of a Neutrosophic SuperHyperGraph has no on-quasi-triangle Extreme style amid some amount of its Extreme SuperHyperVertices. This Extreme setting of the Extreme SuperHyperModel proposes an Extreme SuperHyperSet has only some amount Extreme SuperHyperVertices from one Extreme SuperHyperEdge such that there's no Extreme amount of Extreme SuperHyperEdges more than one involving these some amount of these Extreme

SuperHyperVertices. The Extreme cardinality of this Extreme SuperHyperSet is the maximum and the Extreme case is occurred in the minimum Extreme situation. To sum them up, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Has the maximum Extreme cardinality such that

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Contains some Extreme SuperHyperVertices such that there's distinct-covers-order-amount Extreme SuperHyperEdges for amount of Extreme SuperHyperVertices taken from the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

It means that the Extreme SuperHyperSet of the Extreme SuperHyperVertices

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Is an Extreme R-SuperHyperConnectivities for the Neutrosophic SuperHyperGraph as used Extreme background in the Extreme terms of worst Extreme case and the common theme of the lower Extreme bound occurred in the specific Extreme SuperHyperClasses of the Neutrosophic SuperHyperGraphs which are Extreme free-quasi-triangle.
Assume an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme number of the Extreme SuperHyperVertices. Then every Extreme SuperHyperVertex has at least no Extreme SuperHyperEdge with others in common. Thus those Extreme SuperHyperVertices have the eligibles to be contained in an Extreme R-SuperHyperConnectivities. Those Extreme SuperHyperVertices are potentially included in an Extreme style-R-SuperHyperConnectivities. Formally, consider

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

Are the Extreme SuperHyperVertices of an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus

$$Z_i \sim Z_j,\ i \neq j,\ i, j = 1, 2, \ldots, z.$$

where the $\sim$ isn't an equivalence relation but only the symmetric relation on the Extreme SuperHyperVertices of the Neutrosophic SuperHyperGraph. The formal definition is as follows.

$$Z_i \sim Z_j,\ i \neq j,\ i, j = 1, 2, \ldots, z$$

if and only if Z_i and Z_j are the Extreme SuperHyperVertices and there's only and only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ between the Extreme SuperHyperVertices Z_i and Z_j. The other definition for the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ in the terms of Extreme R-SuperHyperConnectivities is

$$\{a_E, b_E, c_E, \ldots, z_E\}.$$

This definition coincides with the definition of the Extreme R-SuperHyperConnectivities but with slightly differences in the maximum Extreme cardinality amid those Extreme type-SuperHyperSets of the Extreme SuperHyperVertices. Thus the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$\max_z |\{Z_1, Z_2, \ldots, Z_z \mid Z_i \sim Z_j,\ i \neq j,\ i, j = 1, 2, \ldots, z\}|_{\text{Extreme cardinality}},$$

and

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is formalized with mathematical literatures on the Extreme R-SuperHyperConnectivities. Let $Z_i \overset{E}{\sim} Z_j$, be defined as Z_i and Z_j are the Extreme SuperHyperVertices belong to the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus,

$$E = \{Z_1, Z_2, \ldots, Z_z \mid Z_i \overset{E}{\sim} Z_j,\ i \neq j,\ i, j = 1, 2, \ldots, z\}.$$

Or

$$\{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But with the slightly differences,

$$\text{Extreme R-SuperHyperConnectivities} =$$
$$\{Z_1, Z_2, \ldots, Z_z \mid \forall i \neq j,\ i, j = 1, 2, \ldots, z,\ \exists E_x,\ Z_i \overset{E_x}{\sim} Z_j, \}.$$

$$\text{Extreme R-SuperHyperConnectivities} =$$
$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus $E \in E_{ESHG:(V,E)}$ is an Extreme quasi-R-SuperHyperConnectivities where $E \in E_{ESHG:(V,E)}$ is fixed that means $E_x = E \in E_{ESHG:(V,E)}$. for all Extreme intended SuperHyperVertices but in an Extreme SuperHyperConnectivities, $E_x = E \in E_{ESHG:(V,E)}$ could be different and it's not unique. To sum them up, in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. If an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme SuperHyperVertices, then the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

It's straightforward that the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least the maximum Extreme number of Extreme SuperHyperVertices of the Extreme SuperHyperEdges with the maximum number of the Extreme SuperHyperEdges. In other words, the maximum number of the Extreme SuperHyperEdges contains the maximum Extreme number of Extreme SuperHyperVertices are renamed to Extreme SuperHyperConnectivities in some cases but the maximum number of the Extreme SuperHyperEdge with the maximum Extreme number of Extreme SuperHyperVertices, has the Extreme SuperHyperVertices are contained in an Extreme R-SuperHyperConnectivities.
The obvious SuperHyperGraph has no Extreme SuperHyperEdges. But the non-obvious Extreme SuperHyperModel is up. The quasi-SuperHyperModel addresses some issues about the Extreme optimal SuperHyperObject. It specially delivers some remarks on the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that there's distinct amount of Extreme

SuperHyperEdges for distinct amount of Extreme SuperHyperVertices up to all taken from that Extreme SuperHyperSet of the Extreme SuperHyperVertices but this Extreme SuperHyperSet of the Extreme SuperHyperVertices is either has the maximum Extreme SuperHyperCardinality or it doesn't have maximum Extreme SuperHyperCardinality. In a non-obvious SuperHyperModel, there's at least one Extreme SuperHyperEdge containing at least all Extreme SuperHyperVertices. Thus it forms an Extreme quasi-R-SuperHyperConnectivities where the Extreme completion of the Extreme incidence is up in that. Thus it's, literarily, an Extreme embedded R-SuperHyperConnectivities. The SuperHyperNotions of embedded SuperHyperSet and quasi-SuperHyperSet coincide. In the original setting, these types of SuperHyperSets only don't satisfy on the maximum SuperHyperCardinality. Thus the embedded setting is elected such that those SuperHyperSets have the maximum Extreme SuperHyperCardinality and they're Extreme SuperHyperOptimal. The less than two distinct types of Extreme SuperHyperVertices are included in the minimum Extreme style of the embedded Extreme R-SuperHyperConnectivities. The interior types of the Extreme SuperHyperVertices are deciders. Since the Extreme number of SuperHyperNeighbors are only affected by the interior Extreme SuperHyperVertices. The common connections, more precise and more formal, the perfect unique connections inside the Extreme SuperHyperSet for any distinct types of Extreme SuperHyperVertices pose the Extreme R-SuperHyperConnectivities. Thus Extreme exterior SuperHyperVertices could be used only in one Extreme SuperHyperEdge and in Extreme SuperHyperRelation with the interior Extreme SuperHyperVertices in that Extreme SuperHyperEdge. In the embedded Extreme SuperHyperConnectivities, there's the usage of exterior Extreme SuperHyperVertices since they've more connections inside more than outside. Thus the title "exterior" is more relevant than the title "interior". One Extreme SuperHyperVertex has no connection, inside. Thus, the Extreme SuperHyperSet of the Extreme SuperHyperVertices with one SuperHyperElement has been ignored in the exploring to lead on the optimal case implying the Extreme R-SuperHyperConnectivities. The Extreme R-SuperHyperConnectivities with the exclusion of the exclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge and with other terms, the Extreme R-SuperHyperConnectivities with the inclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge, is an Extreme quasi-R-SuperHyperConnectivities. To sum them up, in a connected non-obvious Extreme SuperHyperGraph $ESHG : (V, E)$. There's only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only the maximum possibilities of the distinct interior Extreme SuperHyperVertices inside of any given Extreme quasi-R-SuperHyperConnectivities minus all Extreme SuperHypeNeighbor to some of them but not all of them. In other words, there's only an unique Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only two distinct Extreme SuperHyperVertices in an Extreme quasi-R-SuperHyperConnectivities, minus all Extreme SuperHypeNeighbor to some of them but not all of them.

The main definition of the Extreme R-SuperHyperConnectivities has two titles. an Extreme quasi-R-SuperHyperConnectivities and its corresponded quasi-maximum Extreme R-SuperHyperCardinality are two titles in the terms of quasi-R-styles. For any Extreme number, there's an Extreme quasi-R-SuperHyperConnectivities with that quasi-maximum Extreme SuperHyperCardinality in the terms of the embedded Neutrosophic SuperHyperGraph. If there's an embedded Neutrosophic SuperHyperGraph, then the Extreme quasi-SuperHyperNotions lead us to take the collection of all the Extreme quasi-R-SuperHyperConnectivitiess for all Extreme numbers less than its Extreme corresponded maximum number. The essence of the Extreme SuperHyperConnectivities ends up but this essence starts up in the terms of the Extreme quasi-R-SuperHyperConnectivities, again and more in the operations of collecting all the Extreme quasi-R-SuperHyperConnectivitiess acted on the all possible used formations of the Neutrosophic SuperHyperGraph to achieve one Extreme

number. This Extreme number is
considered as the equivalence class for all corresponded quasi-R-SuperHyperConnectivitiess. Let $z_{\text{Extreme Number}}, S_{\text{Extreme SuperHyperSet}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperSet and an Extreme SuperHyperConnectivities. Then

$$[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

As its consequences, the formal definition of the Extreme SuperHyperConnectivities is re-formalized and redefined as follows.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

To get more precise perceptions, the follow-up expressions propose another formal technical definition for the Extreme SuperHyperConnectivities.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

In more concise and more convenient ways, the modified definition for the Extreme SuperHyperConnectivities poses the upcoming expressions.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

To translate the statement to this mathematical literature, the formulae will be revised.

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

And then,

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

To get more visions in the closer look-up, there's an overall overlook.

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \\
&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid \\
&S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \\
&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid \\
&S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= z_{\text{Extreme Number}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$

$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

Now, the extension of these types of approaches is up. Since the new term, "Extreme SuperHyperNeighborhood", could be redefined as the collection of the Extreme SuperHyperVertices such that any amount of its Extreme SuperHyperVertices are incident to an Extreme SuperHyperEdge. It's, literarily, another name for "Extreme Quasi-SuperHyperConnectivities" but, precisely, it's the generalization of "Extreme Quasi-SuperHyperConnectivities" since "Extreme Quasi-SuperHyperConnectivities" happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and background but "Extreme SuperHyperNeighborhood" may not happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and preliminarily background since there are some ambiguities about the Extreme SuperHyperCardinality arise from it. To get orderly keywords, the terms, "Extreme SuperHyperNeighborhood", "Extreme Quasi-SuperHyperConnectivities", and "Extreme SuperHyperConnectivities" are up.

Thus, let $z_{\text{Extreme Number}}, N_{\text{Extreme SuperHyperNeighborhood}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperNeighborhood and an Extreme SuperHyperConnectivities and the new terms are up.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

And with go back to initial structure,

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max \left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max \left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} = \max \left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max \left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

Thus, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\left\{E \in E_{ESHG:(V,E)} \mid |E|=\max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\right\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\left\{E \in E_{ESHG:(V,E)} \mid |E|=\max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\right\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s** **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG:(V,E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of

them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
Assume a connected Extreme SuperHyperGraph $ESHG : (V, E)$. Let an Extreme SuperHyperEdge $ESHE : E \in E_{ESHG:(V,E)}$ has some Extreme SuperHyperVertices r. Consider all Extreme numbers of those Extreme SuperHyperVertices from that Extreme SuperHyperEdge excluding excluding more than r distinct Extreme SuperHyperVertices, exclude to any given Extreme SuperHyperSet of the Extreme SuperHyperVertices. Consider there's an Extreme R-SuperHyperConnectivities with the least cardinality, the lower sharp Extreme bound for Extreme cardinality. Assume a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE} \setminus \{z\}$ is an Extreme SuperHyperSet S of the Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely but it isn't an Extreme R-SuperHyperConnectivities. Since it doesn't have **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some SuperHyperVertices uniquely. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE} \cup \{z\}$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of Extreme SuperHyperVertices but it isn't an Extreme R-SuperHyperConnectivities. Since it **doesn't do** the Extreme procedure such that such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely [there are at least one Extreme SuperHyperVertex outside implying there's, sometimes in the connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$, an Extreme SuperHyperVertex, titled its Extreme SuperHyperNeighbor, to that Extreme SuperHyperVertex in the Extreme SuperHyperSet S so as S doesn't do "the Extreme procedure".]. There's only **one** Extreme SuperHyperVertex **outside** the intended Extreme SuperHyperSet, $V_{ESHE} \cup \{z\}$, in the terms of Extreme SuperHyperNeighborhood. Thus the obvious Extreme R-SuperHyperConnectivities, V_{ESHE} is up. The obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities, V_{ESHE}, **is** an Extreme SuperHyperSet, V_{ESHE}, **includes** only **all** Extreme SuperHyperVertices does forms any kind of Extreme pairs are titled Extreme SuperHyperNeighbors in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices V_{ESHE}, is the **maximum Extreme SuperHyperCardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices **such that** there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely. Thus, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Any Extreme R-SuperHyperConnectivities only contains all interior Extreme SuperHyperVertices and all exterior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdge where there's any of them has all possible Extreme SuperHyperNeighbors in and there's all Extreme SuperHyperNeighborhoods in with no exception minus all Extreme SuperHypeNeighbors to some of them not all of them but everything is possible about Extreme SuperHyperNeighborhoods and Extreme SuperHyperNeighbors out.
The SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$

$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There are not only **two** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **two** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Doesn't have less than three SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$

$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There aren't only less than three Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities SuperHyperPolynomial} = az^s + bz^t.$$

Is the Extreme SuperHyperSet, not:

$$\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities SuperHyperPolynomial} = az^s + bz^t.$$

Does includes only less than three SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities SuperHyperPolynomial} = az^s + bz^t.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. ■

Example 9.0.3. In the Figure (9.1), the connected Extreme SuperHyperPath $ESHP : (V, E)$, is highlighted and featured. The Extreme SuperHyperSet, in the Extreme SuperHyperModel (9.1), is the SuperHyperConnectivities.

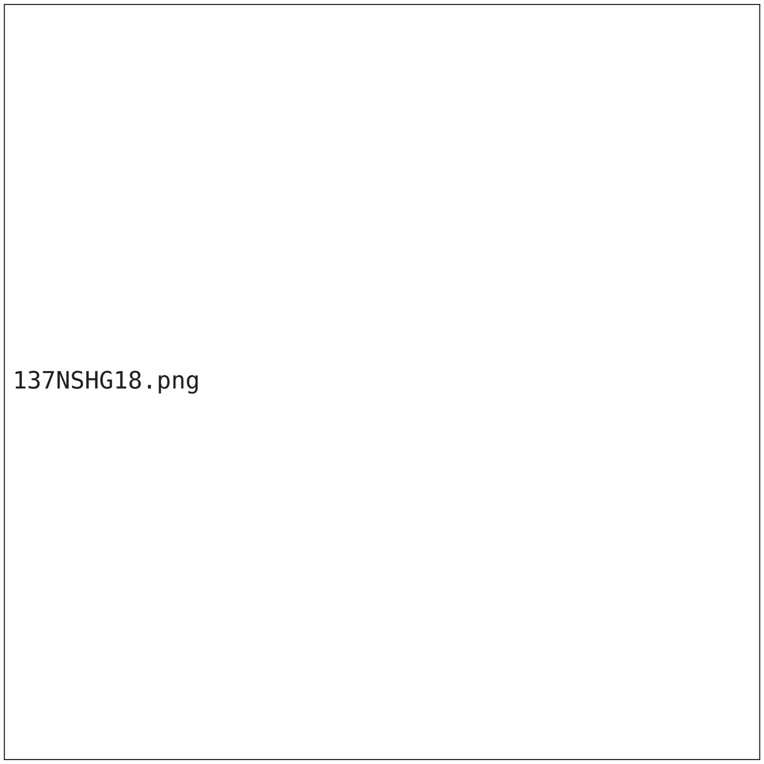


Figure 9.1: an Extreme SuperHyperPath Associated to the Notions of Extreme SuperHyperConnectivities in the Example (9.0.3)

Proposition 9.0.4. *Assume a connected Extreme SuperHyperConnectivities* $ESHC : (V, E)$. *Then an Extreme quasi-R-SuperHyperConnectivities is an Extreme SuperHyperSet of the interior Extreme SuperHyperVertices with only no Extreme exceptions on the form of interior Extreme SuperHyperVertices from the same Extreme SuperHyperNeighborhoods not excluding any Extreme SuperHyperVertex. an Extreme quasi-R-SuperHyperConnectivities has the Extreme half number of all the Extreme SuperHyperEdges in the terms of the maximum Extreme cardinality. Also,*

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{Extreme\ Cardinality}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{Extreme\ Cardinality}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Proof. Assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The SuperHyperSet of the SuperHyperVertices $V \setminus V \setminus \{z\}$ isn't a quasi-R-SuperHyperConnectivities since neither amount of Extreme SuperHyperEdges nor amount of SuperHyperVertices where amount refers to the Extreme number of SuperHyperVertices(-/SuperHyperEdges) more than one to form any kind of SuperHyperEdges or any number of SuperHyperEdges. Let us consider the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

This Extreme SuperHyperSet of the Extreme SuperHyperVertices has the eligibilities to propose property such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices but the maximum Extreme cardinality indicates that these Extreme type-SuperHyperSets couldn't give us the Extreme lower bound in the term of Extreme sharpness. In other words, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices implies at least on-quasi-triangle style is up but sometimes the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices is free-quasi-triangle and it doesn't make a contradiction to the supposition on the connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Thus the minimum case never happens in the generality of the connected loopless Neutrosophic SuperHyperGraphs. Thus if we assume in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is a quasi-R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of a quasi-R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Then we've lost some connected loopless Extreme SuperHyperClasses of the connected loopless Neutrosophic SuperHyperGraphs titled free-triangle, on-triangle, and their quasi-types but the SuperHyperStable is only up in this quasi-R-SuperHyperConnectivities. It's the contradiction to that fact on the generality. There are some counterexamples to deny this statement. One of them comes from the setting of the graph titled path and cycle as the counterexamples-classes or reversely direction star as the examples-classes, are well-known classes in that setting and they could be considered as the examples-classes and counterexamples-classes for the tight bound of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Let $V \setminus V \setminus \{z\}$ in mind. There's no necessity on the SuperHyperEdge since we need at least two SuperHyperVertices to form a SuperHyperEdge. It doesn't withdraw the principles of the main definition since there's no condition to be satisfied but the condition is on the existence of the SuperHyperEdge instead of acting on the SuperHyperVertices. In other words, if there's a SuperHyperEdge, then the Extreme SuperHyperSet has the necessary condition for the intended definition to be applied. Thus the $V \setminus V \setminus \{z\}$ is withdrawn not by the conditions of the main

definition but by the necessity of the pre-condition on the usage of the main definition.
The Extreme structure of the Extreme R-SuperHyperConnectivities decorates the Extreme SuperHyperVertices don't have received any Extreme connections so as this Extreme style implies different versions of Extreme SuperHyperEdges with the maximum Extreme cardinality in the terms of Extreme SuperHyperVertices are spotlight. The lower Extreme bound is to have the maximum Extreme groups of Extreme SuperHyperVertices have perfect Extreme connections inside each of SuperHyperEdges and the outside of this Extreme SuperHyperSet doesn't matter but regarding the connectedness of the used Neutrosophic SuperHyperGraph arising from its Extreme properties taken from the fact that it's simple. If there's no more than one Extreme SuperHyperVertex in the targeted Extreme SuperHyperSet, then there's no Extreme connection. Furthermore, the Extreme existence of one Extreme SuperHyperVertex has no Extreme effect to talk about the Extreme R-SuperHyperConnectivities. Since at least two Extreme SuperHyperVertices involve to make a title in the Extreme background of the Neutrosophic SuperHyperGraph. The Neutrosophic SuperHyperGraph is obvious if it has no Extreme SuperHyperEdge but at least two Extreme SuperHyperVertices make the Extreme version of Extreme SuperHyperEdge. Thus in the Extreme setting of non-obvious Neutrosophic SuperHyperGraph, there are at least one Extreme SuperHyperEdge. It's necessary to mention that the word "Simple" is used as Extreme adjective for the initial Neutrosophic SuperHyperGraph, induces there's no Extreme appearance of the loop Extreme version of the Extreme SuperHyperEdge and this Neutrosophic SuperHyperGraph is said to be loopless. The Extreme adjective "loop" on the basic Extreme framework engages one Extreme SuperHyperVertex but it never happens in this Extreme setting. With these Extreme bases, on a Neutrosophic SuperHyperGraph, there's at least one Extreme SuperHyperEdge thus there's at least an Extreme R-SuperHyperConnectivities has the Extreme cardinality of an Extreme SuperHyperEdge. Thus, an Extreme R-SuperHyperConnectivities has the Extreme cardinality at least an Extreme SuperHyperEdge. Assume an Extreme SuperHyperSet $V \setminus V \setminus \{z\}$. This Extreme SuperHyperSet isn't an Extreme R-SuperHyperConnectivities since either the Neutrosophic SuperHyperGraph is an obvious Extreme SuperHyperModel thus it never happens since there's no Extreme usage of this Extreme framework and even more there's no Extreme connection inside or the Neutrosophic SuperHyperGraph isn't obvious and as its consequences, there's an Extreme contradiction with the term "Extreme R-SuperHyperConnectivities" since the maximum Extreme cardinality never happens for this Extreme style of the Extreme SuperHyperSet and beyond that there's no Extreme connection inside as mentioned in first Extreme case in the forms of drawback for this selected Extreme SuperHyperSet. Let

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Comes up. This Extreme case implies having the Extreme style of on-quasi-triangle Extreme style on the every Extreme elements of this Extreme SuperHyperSet. Precisely, the Extreme R-SuperHyperConnectivities is the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that some Extreme amount of the Extreme SuperHyperVertices are on-quasi-triangle Extreme style. The Extreme cardinality of the v SuperHypeSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Is the maximum in comparison to the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But the lower Extreme bound is up. Thus the minimum Extreme cardinality of the maximum Extreme cardinality ends up the Extreme discussion. The first Extreme term refers to the Extreme setting of the Neutrosophic SuperHyperGraph but this key point is enough since there's an Extreme SuperHyperClass of a Neutrosophic SuperHyperGraph has no on-quasi-triangle Extreme style amid some amount of its Extreme SuperHyperVertices. This Extreme setting of the Extreme SuperHyperModel proposes an Extreme SuperHyperSet has only some amount Extreme SuperHyperVertices from one Extreme SuperHyperEdge such that there's no Extreme amount of Extreme SuperHyperEdges more than one involving these some amount of these Extreme SuperHyperVertices. The Extreme cardinality of this Extreme SuperHyperSet is the maximum and the Extreme case is occurred in the minimum Extreme situation. To sum them up, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Has the maximum Extreme cardinality such that

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Contains some Extreme SuperHyperVertices such that there's distinct-covers-order-amount Extreme SuperHyperEdges for amount of Extreme SuperHyperVertices taken from the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

It means that the Extreme SuperHyperSet of the Extreme SuperHyperVertices

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an Extreme R-SuperHyperConnectivities for the Neutrosophic SuperHyperGraph as used Extreme background in the Extreme terms of worst Extreme case and the common theme of the lower Extreme bound occurred in the specific Extreme SuperHyperClasses of the Neutrosophic SuperHyperGraphs which are Extreme free-quasi-triangle.
Assume an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme number of the Extreme SuperHyperVertices. Then every Extreme SuperHyperVertex has at least no Extreme SuperHyperEdge with others in common. Thus those Extreme SuperHyperVertices have the eligibles to be contained in an Extreme R-SuperHyperConnectivities. Those Extreme SuperHyperVertices are potentially included in an Extreme style-R-SuperHyperConnectivities. Formally, consider

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

Are the Extreme SuperHyperVertices of an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus

$$Z_i \sim Z_j, \ i \neq j, \ i, j = 1, 2, \ldots, z.$$

where the $\sim$ isn't an equivalence relation but only the symmetric relation on the Extreme SuperHyperVertices of the Neutrosophic SuperHyperGraph. The formal definition is as follows.

$$Z_i \sim Z_j, \ i \neq j, \ i, j = 1, 2, \ldots, z$$

if and only if Z_i and Z_j are the Extreme SuperHyperVertices and there's only and only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ between the Extreme SuperHyperVertices Z_i and Z_j. The other definition for the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ in the terms of Extreme R-SuperHyperConnectivities is

$$\{a_E, b_E, c_E, \ldots, z_E\}.$$

This definition coincides with the definition of the Extreme R-SuperHyperConnectivities but with slightly differences in the maximum Extreme cardinality amid those Extreme type-SuperHyperSets of the Extreme SuperHyperVertices. Thus the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$\max_z |\{Z_1, Z_2, \ldots, Z_z \mid Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z\}|_{\text{Extreme cardinality}},$$

and

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E| = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is formalized with mathematical literatures on the Extreme R-SuperHyperConnectivities. Let $Z_i \overset{E}{\sim} Z_j$, be defined as Z_i and Z_j are the Extreme SuperHyperVertices belong to the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus,

$$E = \{Z_1, Z_2, \ldots, Z_z \mid Z_i \overset{E}{\sim} Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z\}.$$

Or

$$\{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E| = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But with the slightly differences,

$$\text{Extreme R-SuperHyperConnectivities} = \{Z_1, Z_2, \ldots, Z_z \mid \forall i \neq j,\ i,j = 1,2,\ldots,z,\ \exists E_x,\ Z_i \overset{E_x}{\sim} Z_j,\}.$$

$$\text{Extreme R-SuperHyperConnectivities} = V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E| = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus $E \in E_{ESHG:(V,E)}$ is an Extreme quasi-R-SuperHyperConnectivities where $E \in E_{ESHG:(V,E)}$ is fixed that means $E_x = E \in E_{ESHG:(V,E)}$. for all Extreme intended SuperHyperVertices but in an Extreme SuperHyperConnectivities, $E_x = E \in E_{ESHG:(V,E)}$ could be different and it's not unique. To sum them up, in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. If an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme SuperHyperVertices, then the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

It's straightforward that the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least the maximum Extreme number of Extreme SuperHyperVertices of the Extreme SuperHyperEdges with the maximum number of the Extreme SuperHyperEdges. In other words, the maximum number of the Extreme SuperHyperEdges contains the maximum Extreme number of Extreme SuperHyperVertices are renamed to Extreme SuperHyperConnectivities in some cases but the maximum number of the Extreme SuperHyperEdge with the maximum Extreme number of Extreme SuperHyperVertices, has the Extreme SuperHyperVertices are contained in an Extreme R-SuperHyperConnectivities.

The obvious SuperHyperGraph has no Extreme SuperHyperEdges. But the non-obvious Extreme SuperHyperModel is up. The quasi-SuperHyperModel addresses some issues about the Extreme optimal SuperHyperObject. It specially delivers some remarks on the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that there's distinct amount of Extreme SuperHyperEdges for distinct amount of Extreme SuperHyperVertices up to all taken from that Extreme SuperHyperSet of the Extreme SuperHyperVertices but this Extreme SuperHyperSet of the Extreme SuperHyperVertices is either has the maximum Extreme SuperHyperCardinality or it doesn't have maximum Extreme SuperHyperCardinality. In a non-obvious SuperHyperModel, there's at least one Extreme SuperHyperEdge containing at least all Extreme SuperHyperVertices. Thus it forms an Extreme quasi-R-SuperHyperConnectivities where the Extreme completion of the Extreme incidence is up in that. Thus it's, literarily, an Extreme embedded R-SuperHyperConnectivities. The SuperHyperNotions of embedded SuperHyperSet and quasi-SuperHyperSet coincide. In the original setting, these types of SuperHyperSets only don't satisfy on the maximum SuperHyperCardinality. Thus the embedded setting is elected such that those SuperHyperSets have the maximum Extreme SuperHyperCardinality and they're Extreme SuperHyperOptimal. The less than two distinct types of Extreme SuperHyperVertices are included in the minimum Extreme style of the embedded Extreme R-SuperHyperConnectivities. The interior types of the Extreme SuperHyperVertices are deciders. Since the Extreme number of SuperHyperNeighbors are only affected by the interior Extreme SuperHyperVertices. The common connections, more precise and more formal, the perfect unique connections inside the Extreme SuperHyperSet for any distinct types of Extreme SuperHyperVertices pose the Extreme R-SuperHyperConnectivities. Thus Extreme exterior SuperHyperVertices could be used only in one Extreme SuperHyperEdge and in Extreme SuperHyperRelation with the interior Extreme SuperHyperVertices in that Extreme SuperHyperEdge. In the embedded Extreme SuperHyperConnectivities, there's the usage of exterior Extreme SuperHyperVertices since they've more connections inside more than outside. Thus the title "exterior" is more relevant than the title "interior". One Extreme SuperHyperVertex has no connection, inside. Thus, the Extreme SuperHyperSet of the Extreme SuperHyperVertices with one SuperHyperElement has been ignored in the exploring to lead on the optimal case implying the Extreme R-SuperHyperConnectivities. The Extreme R-SuperHyperConnectivities with the exclusion of the exclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge and with other terms, the Extreme R-SuperHyperConnectivities with the inclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge, is an Extreme quasi-R-SuperHyperConnectivities. To sum them up, in a connected non-obvious Extreme SuperHyperGraph $ESHG : (V, E)$. There's only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only the maximum possibilities of the distinct interior Extreme SuperHyperVertices inside of any given Extreme quasi-R-SuperHyperConnectivities minus all Extreme SuperHypeNeighbor to some of them but not all of them. In other words, there's only an unique Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only two distinct Extreme SuperHyperVertices in an Extreme quasi-R-SuperHyperConnectivities, minus all Extreme SuperHypeNeighbor to some of them but not all of them.

The main definition of the Extreme R-SuperHyperConnectivities has two titles. an Extreme quasi-R-SuperHyperConnectivities and its corresponded quasi-maximum Extreme R-SuperHyperCardinality are two titles in the terms of quasi-R-styles. For any Extreme number, there's an Extreme quasi-R-SuperHyperConnectivities with that quasi-maximum Extreme SuperHyperCardinality in the

terms of the embedded Neutrosophic SuperHyperGraph. If there's an embedded Neutrosophic SuperHyperGraph, then the Extreme quasi-SuperHyperNotions lead us to take the collection of all the Extreme quasi-R-SuperHyperConnectivitiess for all Extreme numbers less than its Extreme corresponded maximum number. The essence of the Extreme SuperHyperConnectivities ends up but this essence starts up in the terms of the Extreme quasi-R-SuperHyperConnectivities, again and more in the operations of collecting all the Extreme quasi-R-SuperHyperConnectivitiess acted on the all possible used formations of the Neutrosophic SuperHyperGraph to achieve one Extreme number. This Extreme number is
considered as the equivalence class for all corresponded quasi-R-SuperHyperConnectivitiess. Let $z_{\text{Extreme Number}}, S_{\text{Extreme SuperHyperSet}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperSet and an Extreme SuperHyperConnectivities. Then

$$[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

As its consequences, the formal definition of the Extreme SuperHyperConnectivities is re-formalized and redefined as follows.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

To get more precise perceptions, the follow-up expressions propose another formal technical definition for the Extreme SuperHyperConnectivities.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

In more concise and more convenient ways, the modified definition for the Extreme SuperHyperConnectivities poses the upcoming expressions.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

To translate the statement to this mathematical literature, the formulae will be revised.

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

And then,

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

To get more visions in the closer look-up, there's an overall overlook.

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \\
&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid \\
&\ S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, \\
&\ |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \\
&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid \\
&\ S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, \\
&\ |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= z_{\text{Extreme Number}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} \\
&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$

$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

Now, the extension of these types of approaches is up. Since the new term, "Extreme SuperHyperNeighborhood", could be redefined as the collection of the Extreme SuperHyperVertices such that any amount of its Extreme SuperHyperVertices are incident to an Extreme SuperHyperEdge. It's, literarily, another name for "Extreme Quasi-SuperHyperConnectivities" but, precisely, it's the generalization of "Extreme Quasi-SuperHyperConnectivities" since "Extreme Quasi-SuperHyperConnectivities" happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and background but "Extreme SuperHyperNeighborhood" may not happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and preliminarily background since there are some ambiguities about the Extreme SuperHyperCardinality arise from it. To get orderly keywords, the terms, "Extreme SuperHyperNeighborhood", "Extreme Quasi-SuperHyperConnectivities", and "Extreme SuperHyperConnectivities" are up.

Thus, let $z_{\text{Extreme Number}}, N_{\text{Extreme SuperHyperNeighborhood}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperNeighborhood and an Extreme SuperHyperConnectivities and the new terms are up.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= z_{\text{Extreme Number}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

And with go back to initial structure,

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

Thus, in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\left\{E \in E_{ESHG:(V,E)} \mid |E|=\max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\right\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\left\{E \in E_{ESHG:(V,E)} \mid |E|=\max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\right\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s** **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of

them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
Assume a connected Extreme SuperHyperGraph $ESHG : (V, E)$. Let an Extreme SuperHyperEdge $ESHE : E \in E_{ESHG:(V,E)}$ has some Extreme SuperHyperVertices r. Consider all Extreme numbers of those Extreme SuperHyperVertices from that Extreme SuperHyperEdge excluding excluding more than r distinct Extreme SuperHyperVertices, exclude to any given Extreme SuperHyperSet of the Extreme SuperHyperVertices. Consider there's an Extreme R-SuperHyperConnectivities with the least cardinality, the lower sharp Extreme bound for Extreme cardinality. Assume a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE} \setminus \{z\}$ is an Extreme SuperHyperSet S of the Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely but it isn't an Extreme R-SuperHyperConnectivities. Since it doesn't have **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some SuperHyperVertices uniquely. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE} \cup \{z\}$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of Extreme SuperHyperVertices but it isn't an Extreme R-SuperHyperConnectivities. Since it **doesn't do** the Extreme procedure such that such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely [there are at least one Extreme SuperHyperVertex outside implying there's, sometimes in the connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$, an Extreme SuperHyperVertex, titled its Extreme SuperHyperNeighbor, to that Extreme SuperHyperVertex in the Extreme SuperHyperSet S so as S doesn't do "the Extreme procedure".]. There's only **one** Extreme SuperHyperVertex **outside** the intended Extreme SuperHyperSet, $V_{ESHE} \cup \{z\}$, in the terms of Extreme SuperHyperNeighborhood. Thus the obvious Extreme R-SuperHyperConnectivities, V_{ESHE} is up. The obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities, V_{ESHE}, **is** an Extreme SuperHyperSet, V_{ESHE}, **includes** only **all** Extreme SuperHyperVertices does forms any kind of Extreme pairs are titled Extreme SuperHyperNeighbors in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices V_{ESHE}, is the **maximum Extreme SuperHyperCardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices **such that** there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely. Thus, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Any Extreme R-SuperHyperConnectivities only contains all interior Extreme SuperHyperVertices and all exterior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdge where there's any of them has all possible Extreme SuperHyperNeighbors in and there's all Extreme SuperHyperNeighborhoods in with no exception minus all Extreme SuperHypeNeighbors to some of them not all of them but everything is possible about Extreme SuperHyperNeighborhoods and Extreme SuperHyperNeighbors out.
The SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$

$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There are not only **two** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **two** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Doesn't have less than three SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$

$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^s, \{V_j\}_{j=1}^t.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.
\end{aligned}$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s** **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There aren't only less than three Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^s, \{V_j\}_{j=1}^t.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.
\end{aligned}$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^s, \{V_j\}_{j=1}^t.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.
\end{aligned}$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$=\{E_{2i-1}\}_{i=1}^{\lfloor\frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2}\rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$=2z^{\lfloor\frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2}\rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities}=\{V_i\}_{i=1}^{s},\{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial}=az^s+bz^t.$$

Is the Extreme SuperHyperSet, not:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$=\{E_{2i-1}\}_{i=1}^{\lfloor\frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2}\rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$=2z^{\lfloor\frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2}\rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities}=\{V_i\}_{i=1}^{s},\{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial}=az^s+bz^t.$$

Does includes only less than three SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG:(V,E)$. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$=\{E_{2i-1}\}_{i=1}^{\lfloor\frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2}\rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$=2z^{\lfloor\frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2}\rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities}=\{V_i\}_{i=1}^{s},\{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial}=az^s+bz^t.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. ■

Example 9.0.5. In the Figure (9.2), the connected Extreme SuperHyperConnectivities $NSHC:(V,E)$, is highlighted and featured. The obtained Extreme SuperHyperSet, in the Extreme SuperHyperModel (9.2), is the Extreme SuperHyperConnectivities.

137NSHG19.png

Figure 9.2: an Extreme SuperHyperConnectivities Associated to the Extreme Notions of Extreme SuperHyperConnectivities in the Extreme Example (9.0.5)

Proposition 9.0.6. *Assume a connected Extreme SuperHyperStar $ESHS : (V, E)$. Then an Extreme quasi-R-SuperHyperConnectivities is an Extreme SuperHyperSet of the interior Extreme SuperHyper-Vertices, corresponded to an Extreme SuperHyperEdge. an Extreme quasi-R-SuperHyperConnectivities has the Extreme number of the Extreme cardinality of the one Extreme SuperHyperEdge. Also,*

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&= \{E \in E_{ESHG:(V,E)}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= \sum_{|E_{ESHG:(V,E)}|_{Extreme\ Cardinality}} z^{|E|_{Extreme\ Cardinality}\ |\ E:\in E_{ESHG:(V,E)}}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.
\end{aligned}$$

Proof. Assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The SuperHyperSet of the SuperHyperVertices $V \setminus V \setminus \{z\}$ isn't a quasi-R-SuperHyperConnectivities since neither amount of Extreme SuperHyperEdges nor amount of SuperHyperVertices where amount refers to the Extreme number of SuperHyperVertices(-/SuperHyperEdges) more than one to form any kind of SuperHyperEdges or any number of SuperHyperEdges. Let us consider the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

This Extreme SuperHyperSet of the Extreme SuperHyperVertices has the eligibilities to propose property such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices but the maximum Extreme cardinality indicates that these Extreme type-SuperHyperSets couldn't give us the Extreme lower bound in the term of Extreme sharpness. In other words, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices implies at least on-quasi-triangle style is up but sometimes the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices is free-quasi-triangle and it doesn't make a contradiction to the supposition on the connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Thus the minimum case never happens in the generality of the connected loopless Neutrosophic SuperHyperGraphs. Thus if we assume in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is a quasi-R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of a quasi-R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Then we've lost some connected loopless Extreme SuperHyperClasses of the connected loopless Neutrosophic SuperHyperGraphs titled free-triangle, on-triangle, and their quasi-types but the SuperHyperStable is only up in this quasi-R-SuperHyperConnectivities. It's the contradiction to that fact on the generality. There are some counterexamples to deny this statement. One of them comes from the setting of the graph titled path and cycle as the counterexamples-classes or reversely direction star as the examples-classes, are well-known classes in that setting and they could be considered as the examples-classes and counterexamples-classes for the tight bound of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Let $V \setminus V \setminus \{z\}$ in mind. There's no necessity on the SuperHyperEdge since we need at least two SuperHyperVertices to form a SuperHyperEdge. It doesn't withdraw the principles of the main definition since there's no condition to be satisfied but the condition is on the existence of the SuperHyperEdge instead of acting on the SuperHyperVertices. In other words, if there's a SuperHyperEdge, then the Extreme SuperHyperSet has the necessary condition for the intended definition to be applied. Thus the $V \setminus V \setminus \{z\}$ is withdrawn not by the conditions of the main definition but by the necessity of the pre-condition on the usage of the main definition.
The Extreme structure of the Extreme R-SuperHyperConnectivities decorates the Extreme

SuperHyperVertices don't have received any Extreme connections so as this Extreme style implies different versions of Extreme SuperHyperEdges with the maximum Extreme cardinality in the terms of Extreme SuperHyperVertices are spotlight. The lower Extreme bound is to have the maximum Extreme groups of Extreme SuperHyperVertices have perfect Extreme connections inside each of SuperHyperEdges and the outside of this Extreme SuperHyperSet doesn't matter but regarding the connectedness of the used Neutrosophic SuperHyperGraph arising from its Extreme properties taken from the fact that it's simple. If there's no more than one Extreme SuperHyperVertex in the targeted Extreme SuperHyperSet, then there's no Extreme connection. Furthermore, the Extreme existence of one Extreme SuperHyperVertex has no Extreme effect to talk about the Extreme R-SuperHyperConnectivities. Since at least two Extreme SuperHyperVertices involve to make a title in the Extreme background of the Neutrosophic SuperHyperGraph. The Neutrosophic SuperHyperGraph is obvious if it has no Extreme SuperHyperEdge but at least two Extreme SuperHyperVertices make the Extreme version of Extreme SuperHyperEdge. Thus in the Extreme setting of non-obvious Neutrosophic SuperHyperGraph, there are at least one Extreme SuperHyperEdge. It's necessary to mention that the word "Simple" is used as Extreme adjective for the initial Neutrosophic SuperHyperGraph, induces there's no Extreme appearance of the loop Extreme version of the Extreme SuperHyperEdge and this Neutrosophic SuperHyperGraph is said to be loopless. The Extreme adjective "loop" on the basic Extreme framework engages one Extreme SuperHyperVertex but it never happens in this Extreme setting. With these Extreme bases, on a Neutrosophic SuperHyperGraph, there's at least one Extreme SuperHyperEdge thus there's at least an Extreme R-SuperHyperConnectivities has the Extreme cardinality of an Extreme SuperHyperEdge. Thus, an Extreme R-SuperHyperConnectivities has the Extreme cardinality at least an Extreme SuperHyperEdge. Assume an Extreme SuperHyperSet $V \setminus V \setminus \{z\}$. This Extreme SuperHyperSet isn't an Extreme R-SuperHyperConnectivities since either the Neutrosophic SuperHyperGraph is an obvious Extreme SuperHyperModel thus it never happens since there's no Extreme usage of this Extreme framework and even more there's no Extreme connection inside or the Neutrosophic SuperHyperGraph isn't obvious and as its consequences, there's an Extreme contradiction with the term "Extreme R-SuperHyperConnectivities" since the maximum Extreme cardinality never happens for this Extreme style of the Extreme SuperHyperSet and beyond that there's no Extreme connection inside as mentioned in first Extreme case in the forms of drawback for this selected Extreme SuperHyperSet. Let

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Comes up. This Extreme case implies having the Extreme style of on-quasi-triangle Extreme style on the every Extreme elements of this Extreme SuperHyperSet. Precisely, the Extreme R-SuperHyperConnectivities is the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that some Extreme amount of the Extreme SuperHyperVertices are on-quasi-triangle Extreme style. The Extreme cardinality of the v SuperHypeSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Is the maximum in comparison to the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But the lower Extreme bound is up. Thus the minimum Extreme cardinality of the maximum Extreme cardinality ends up the Extreme discussion. The first Extreme term refers to the

Extreme setting of the Neutrosophic SuperHyperGraph but this key point is enough since there's an Extreme SuperHyperClass of a Neutrosophic SuperHyperGraph has no on-quasi-triangle Extreme style amid some amount of its Extreme SuperHyperVertices. This Extreme setting of the Extreme SuperHyperModel proposes an Extreme SuperHyperSet has only some amount Extreme SuperHyperVertices from one Extreme SuperHyperEdge such that there's no Extreme amount of Extreme SuperHyperEdges more than one involving these some amount of these Extreme SuperHyperVertices. The Extreme cardinality of this Extreme SuperHyperSet is the maximum and the Extreme case is occurred in the minimum Extreme situation. To sum them up, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Has the maximum Extreme cardinality such that

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Contains some Extreme SuperHyperVertices such that there's distinct-covers-order-amount Extreme SuperHyperEdges for amount of Extreme SuperHyperVertices taken from the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

It means that the Extreme SuperHyperSet of the Extreme SuperHyperVertices

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an Extreme R-SuperHyperConnectivities for the Neutrosophic SuperHyperGraph as used Extreme background in the Extreme terms of worst Extreme case and the common theme of the lower Extreme bound occurred in the specific Extreme SuperHyperClasses of the Neutrosophic SuperHyperGraphs which are Extreme free-quasi-triangle.
Assume an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme number of the Extreme SuperHyperVertices. Then every Extreme SuperHyperVertex has at least no Extreme SuperHyperEdge with others in common. Thus those Extreme SuperHyperVertices have the eligibles to be contained in an Extreme R-SuperHyperConnectivities. Those Extreme SuperHyperVertices are potentially included in an Extreme style-R-SuperHyperConnectivities. Formally, consider

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

Are the Extreme SuperHyperVertices of an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus

$$Z_i \sim Z_j, \ i \neq j, \ i, j = 1, 2, \ldots, z.$$

where the $\sim$ isn't an equivalence relation but only the symmetric relation on the Extreme SuperHyperVertices of the Neutrosophic SuperHyperGraph. The formal definition is as follows.

$$Z_i \sim Z_j, \ i \neq j, \ i, j = 1, 2, \ldots, z$$

if and only if Z_i and Z_j are the Extreme SuperHyperVertices and there's only and only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ between the Extreme SuperHyperVertices Z_i and Z_j.

The other definition for the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ in the terms of Extreme R-SuperHyperConnectivities is

$$\{a_E, b_E, c_E, \ldots, z_E\}.$$

This definition coincides with the definition of the Extreme R-SuperHyperConnectivities but with slightly differences in the maximum Extreme cardinality amid those Extreme type-SuperHyperSets of the Extreme SuperHyperVertices. Thus the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$\max_z |\{Z_1, Z_2, \ldots, Z_z \mid Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z\}|_{\text{Extreme cardinality}},$$

and

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is formalized with mathematical literatures on the Extreme R-SuperHyperConnectivities. Let $Z_i \overset{E}{\sim} Z_j$, be defined as Z_i and Z_j are the Extreme SuperHyperVertices belong to the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus,

$$E = \{Z_1, Z_2, \ldots, Z_z \mid Z_i \overset{E}{\sim} Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z\}.$$

Or

$$\{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But with the slightly differences,

$$\text{Extreme R-SuperHyperConnectivities} = \{Z_1, Z_2, \ldots, Z_z \mid \forall i \neq j,\ i,j = 1,2,\ldots,z,\ \exists E_x,\ Z_i \overset{E_x}{\sim} Z_j,\}.$$

$$\text{Extreme R-SuperHyperConnectivities} = V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus $E \in E_{ESHG:(V,E)}$ is an Extreme quasi-R-SuperHyperConnectivities where $E \in E_{ESHG:(V,E)}$ is fixed that means $E_x = E \in E_{ESHG:(V,E)}$. for all Extreme intended SuperHyperVertices but in an Extreme SuperHyperConnectivities, $E_x = E \in E_{ESHG:(V,E)}$ could be different and it's not unique. To sum them up, in a connected Extreme SuperHyperGraph $ESHG : (V,E)$. If an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme SuperHyperVertices, then the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

It's straightforward that the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least the maximum Extreme number of Extreme SuperHyperVertices of the Extreme SuperHyperEdges with the maximum number of the Extreme SuperHyperEdges. In other words, the maximum number of the Extreme SuperHyperEdges contains the maximum Extreme number of Extreme SuperHyperVertices are renamed to Extreme SuperHyperConnectivities in some cases but the maximum number of the Extreme SuperHyperEdge with the maximum Extreme number of Extreme SuperHyperVertices, has the Extreme SuperHyperVertices are contained in an Extreme

R-SuperHyperConnectivities.
The obvious SuperHyperGraph has no Extreme SuperHyperEdges. But the non-obvious Extreme SuperHyperModel is up. The quasi-SuperHyperModel addresses some issues about the Extreme optimal SuperHyperObject. It specially delivers some remarks on the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that there's distinct amount of Extreme SuperHyperEdges for distinct amount of Extreme SuperHyperVertices up to all taken from that Extreme SuperHyperSet of the Extreme SuperHyperVertices but this Extreme SuperHyperSet of the Extreme SuperHyperVertices is either has the maximum Extreme SuperHyperCardinality or it doesn't have maximum Extreme SuperHyperCardinality. In a non-obvious SuperHyperModel, there's at least one Extreme SuperHyperEdge containing at least all Extreme SuperHyperVertices. Thus it forms an Extreme quasi-R-SuperHyperConnectivities where the Extreme completion of the Extreme incidence is up in that. Thus it's, literarily, an Extreme embedded R-SuperHyperConnectivities. The SuperHyperNotions of embedded SuperHyperSet and quasi-SuperHyperSet coincide. In the original setting, these types of SuperHyperSets only don't satisfy on the maximum SuperHyperCardinality. Thus the embedded setting is elected such that those SuperHyperSets have the maximum Extreme SuperHyperCardinality and they're Extreme SuperHyperOptimal. The less than two distinct types of Extreme SuperHyperVertices are included in the minimum Extreme style of the embedded Extreme R-SuperHyperConnectivities. The interior types of the Extreme SuperHyperVertices are deciders. Since the Extreme number of SuperHyperNeighbors are only affected by the interior Extreme SuperHyperVertices. The common connections, more precise and more formal, the perfect unique connections inside the Extreme SuperHyperSet for any distinct types of Extreme SuperHyperVertices pose the Extreme R-SuperHyperConnectivities. Thus Extreme exterior SuperHyperVertices could be used only in one Extreme SuperHyperEdge and in Extreme SuperHyperRelation with the interior Extreme SuperHyperVertices in that Extreme SuperHyperEdge. In the embedded Extreme SuperHyperConnectivities, there's the usage of exterior Extreme SuperHyperVertices since they've more connections inside more than outside. Thus the title "exterior" is more relevant than the title "interior". One Extreme SuperHyperVertex has no connection, inside. Thus, the Extreme SuperHyperSet of the Extreme SuperHyperVertices with one SuperHyperElement has been ignored in the exploring to lead on the optimal case implying the Extreme R-SuperHyperConnectivities. The Extreme R-SuperHyperConnectivities with the exclusion of the exclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge and with other terms, the Extreme R-SuperHyperConnectivities with the inclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge, is an Extreme quasi-R-SuperHyperConnectivities. To sum them up, in a connected non-obvious Extreme SuperHyperGraph $ESHG : (V, E)$. There's only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only the maximum possibilities of the distinct interior Extreme SuperHyperVertices inside of any given Extreme quasi-R-SuperHyperConnectivities minus all Extreme SuperHypeNeighbor to some of them but not all of them. In other words, there's only an unique Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only two distinct Extreme SuperHyperVertices in an Extreme quasi-R-SuperHyperConnectivities, minus all Extreme SuperHypeNeighbor to some of them but not all of them.
The main definition of the Extreme R-SuperHyperConnectivities has two titles. an Extreme quasi-R-SuperHyperConnectivities and its corresponded quasi-maximum Extreme R-SuperHyperCardinality are two titles in the terms of quasi-R-styles. For any Extreme number, there's an Extreme quasi-R-SuperHyperConnectivities with that quasi-maximum Extreme SuperHyperCardinality in the terms of the embedded Neutrosophic SuperHyperGraph. If there's an embedded Neutrosophic SuperHyperGraph, then the Extreme quasi-SuperHyperNotions lead us to take the collection of

all the Extreme quasi-R-SuperHyperConnectivitiess for all Extreme numbers less than its Extreme corresponded maximum number. The essence of the Extreme SuperHyperConnectivities ends up but this essence starts up in the terms of the Extreme quasi-R-SuperHyperConnectivities, again and more in the operations of collecting all the Extreme quasi-R-SuperHyperConnectivitiess acted on the all possible used formations of the Neutrosophic SuperHyperGraph to achieve one Extreme number. This Extreme number is
considered as the equivalence class for all corresponded quasi-R-SuperHyperConnectivitiess. Let $z_{\text{Extreme Number}}, S_{\text{Extreme SuperHyperSet}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperSet and an Extreme SuperHyperConnectivities. Then

$$[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

As its consequences, the formal definition of the Extreme SuperHyperConnectivities is re-formalized and redefined as follows.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

To get more precise perceptions, the follow-up expressions propose another formal technical definition for the Extreme SuperHyperConnectivities.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

In more concise and more convenient ways, the modified definition for the Extreme SuperHyperConnectivities poses the upcoming expressions.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

To translate the statement to this mathematical literature, the formulae will be revised.

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} \\
&= \max \left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

And then,

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max \left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

To get more visions in the closer look-up, there's an overall overlook.

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \\
&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid \\
&\ S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, \\
&\ |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max \left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \\
&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid \\
&\ S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, \\
&\ |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= z_{\text{Extreme Number}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max \left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

$$\begin{aligned}
&G_{\text{Extreme SuperHyperConnectivities}} = \\
&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid \\
&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} \\
&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} \\
&= \max \left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.
\end{aligned}$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$

$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

Now, the extension of these types of approaches is up. Since the new term, "Extreme SuperHyperNeighborhood", could be redefined as the collection of the Extreme SuperHyperVertices such that any amount of its Extreme SuperHyperVertices are incident to an Extreme SuperHyperEdge. It's, literarily, another name for "Extreme Quasi-SuperHyperConnectivities" but, precisely, it's the generalization of "Extreme Quasi-SuperHyperConnectivities" since "Extreme Quasi-SuperHyperConnectivities" happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and background but "Extreme SuperHyperNeighborhood" may not happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and preliminarily background since there are some ambiguities about the Extreme SuperHyperCardinality arise from it. To get orderly keywords, the terms, "Extreme SuperHyperNeighborhood", "Extreme Quasi-SuperHyperConnectivities", and "Extreme SuperHyperConnectivities" are up.

Thus, let $z_{\text{Extreme Number}}, N_{\text{Extreme SuperHyperNeighborhood}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperNeighborhood and an Extreme SuperHyperConnectivities and the new terms are up.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

And with go back to initial structure,

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}.$$

Thus, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s** **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of

them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
Assume a connected Extreme SuperHyperGraph $ESHG:(V,E)$. Let an Extreme SuperHyperEdge $ESHE:E\in E_{ESHG:(V,E)}$ has some Extreme SuperHyperVertices r. Consider all Extreme numbers of those Extreme SuperHyperVertices from that Extreme SuperHyperEdge excluding excluding more than r distinct Extreme SuperHyperVertices, exclude to any given Extreme SuperHyperSet of the Extreme SuperHyperVertices. Consider there's an Extreme R-SuperHyperConnectivities with the least cardinality, the lower sharp Extreme bound for Extreme cardinality. Assume a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE}\setminus\{z\}$ is an Extreme SuperHyperSet S of the Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely but it isn't an Extreme R-SuperHyperConnectivities. Since it doesn't have **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some SuperHyperVertices uniquely. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE}\cup\{z\}$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of Extreme SuperHyperVertices but it isn't an Extreme R-SuperHyperConnectivities. Since it **doesn't do** the Extreme procedure such that such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely [there are at least one Extreme SuperHyperVertex outside implying there's, sometimes in the connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$, an Extreme SuperHyperVertex, titled its Extreme SuperHyperNeighbor, to that Extreme SuperHyperVertex in the Extreme SuperHyperSet S so as S doesn't do "the Extreme procedure".]. There's only **one** Extreme SuperHyperVertex **outside** the intended Extreme SuperHyperSet, $V_{ESHE}\cup\{z\}$, in the terms of Extreme SuperHyperNeighborhood. Thus the obvious Extreme R-SuperHyperConnectivities, V_{ESHE} is up. The obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities, V_{ESHE}, **is** an Extreme SuperHyperSet, V_{ESHE}, **includes** only **all** Extreme SuperHyperVertices does forms any kind of Extreme pairs are titled Extreme SuperHyperNeighbors in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices V_{ESHE}, is the **maximum Extreme SuperHyperCardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices **such that** there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely. Thus, in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Any Extreme R-SuperHyperConnectivities only contains all interior Extreme SuperHyperVertices and all exterior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdge where there's any of them has all possible Extreme SuperHyperNeighbors in and there's all Extreme SuperHyperNeighborhoods in with no exception minus all Extreme SuperHypeNeighbors to some of them not all of them but everything is possible about Extreme SuperHyperNeighborhoods and Extreme SuperHyperNeighbors out.
The SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$=\{E\in E_{ESHG:(V,E)}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$

$$= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E \in E_{ESHG:(V,E)}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There are not only **two** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **two** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E \in E_{ESHG:(V,E)}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.$$

Doesn't have less than three SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E \in E_{ESHG:(V,E)}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.$$

$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E \in E_{ESHG:(V,E)}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There aren't only less than three Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E \in E_{ESHG:(V,E)}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E \in E_{ESHG:(V,E)}\}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&= \{E \in E_{ESHG:(V,E)}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.
\end{aligned}$$

Is the Extreme SuperHyperSet, not:

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&= \{E \in E_{ESHG:(V,E)}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.
\end{aligned}$$

Does includes only less than three SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

“Extreme SuperHyperConnectivities”

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&= \{E \in E_{ESHG:(V,E)}\}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= \sum_{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}} z^{|E|_{\text{Extreme Cardinality}} \ | \ E:\in E_{ESHG:(V,E)}}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}, \ldots.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = z^s + z^t +, \ldots.
\end{aligned}$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. ■

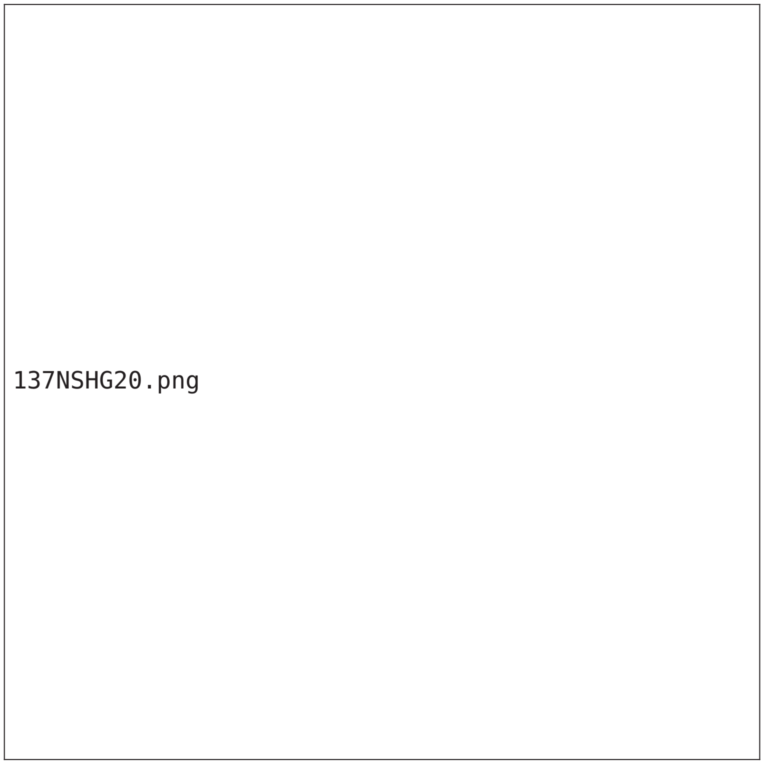


Figure 9.3: an Extreme SuperHyperStar Associated to the Extreme Notions of Extreme SuperHyperConnectivities in the Extreme Example (9.0.7)

Example 9.0.7. In the Figure (9.3), the connected Extreme SuperHyperStar $ESHS : (V, E)$, is highlighted and featured. The obtained Extreme SuperHyperSet, by the Algorithm in previous Extreme result, of the Extreme SuperHyperVertices of the connected Extreme SuperHyperStar $ESHS : (V, E)$, in the Extreme SuperHyperModel (9.3), is the Extreme SuperHyperConnectivities.

Proposition 9.0.8. *Assume a connected Extreme SuperHyperBipartite $ESHB : (V, E)$. Then an Extreme R-SuperHyperConnectivities is an Extreme SuperHyperSet of the interior Extreme SuperHyperVertices with no Extreme exceptions in the form of interior Extreme SuperHyperVertices titled Extreme SuperHyperNeighbors. an Extreme R-SuperHyperConnectivities has the Extreme maximum number of on Extreme cardinality of the minimum SuperHyperPart minus those have common Extreme SuperHyperNeighbors and not unique Extreme SuperHyperNeighbors. Also,*

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{Extreme\ Cardinality}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{Extreme\ Cardinality}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$

$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s.$$

Proof. Assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The SuperHyperSet of the SuperHyperVertices $V \setminus V \setminus \{z\}$ isn't a quasi-R-SuperHyperConnectivities since neither amount of Extreme SuperHyperEdges nor amount of SuperHyperVertices where amount refers to the Extreme number of SuperHyperVertices(-/SuperHyperEdges) more than one to form any kind of SuperHyperEdges or any number of SuperHyperEdges. Let us consider the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

This Extreme SuperHyperSet of the Extreme SuperHyperVertices has the eligibilities to propose property such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices but the maximum Extreme cardinality indicates that these Extreme type-SuperHyperSets couldn't give us the Extreme lower bound in the term of Extreme sharpness. In other words, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices implies at least on-quasi-triangle style is up but sometimes the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices is free-quasi-triangle and it doesn't make a contradiction to the supposition on the connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Thus the minimum case never happens in the generality of the connected loopless Neutrosophic SuperHyperGraphs. Thus if we assume in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is a quasi-R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of a quasi-R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Then we've lost some connected loopless Extreme SuperHyperClasses of the connected loopless Neutrosophic SuperHyperGraphs titled free-triangle, on-triangle, and their quasi-types but the SuperHyperStable is only up in this quasi-R-SuperHyperConnectivities. It's the contradiction to that fact on the generality. There are some counterexamples to deny this statement. One of them comes from the setting of the graph titled path and cycle as the counterexamples-classes or reversely direction star as the examples-classes, are well-known classes in that setting and they could be considered as the examples-classes and counterexamples-classes for the tight bound of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Let $V \setminus V \setminus \{z\}$ in mind. There's no necessity on the SuperHyperEdge since we need at least two SuperHyperVertices to form a SuperHyperEdge. It doesn't withdraw the principles of the

main definition since there's no condition to be satisfied but the condition is on the existence of the SuperHyperEdge instead of acting on the SuperHyperVertices. In other words, if there's a SuperHyperEdge, then the Extreme SuperHyperSet has the necessary condition for the intended definition to be applied. Thus the $V \setminus V \setminus \{z\}$ is withdrawn not by the conditions of the main definition but by the necessity of the pre-condition on the usage of the main definition.
The Extreme structure of the Extreme R-SuperHyperConnectivities decorates the Extreme SuperHyperVertices don't have received any Extreme connections so as this Extreme style implies different versions of Extreme SuperHyperEdges with the maximum Extreme cardinality in the terms of Extreme SuperHyperVertices are spotlight. The lower Extreme bound is to have the maximum Extreme groups of Extreme SuperHyperVertices have perfect Extreme connections inside each of SuperHyperEdges and the outside of this Extreme SuperHyperSet doesn't matter but regarding the connectedness of the used Neutrosophic SuperHyperGraph arising from its Extreme properties taken from the fact that it's simple. If there's no more than one Extreme SuperHyperVertex in the targeted Extreme SuperHyperSet, then there's no Extreme connection. Furthermore, the Extreme existence of one Extreme SuperHyperVertex has no Extreme effect to talk about the Extreme R-SuperHyperConnectivities. Since at least two Extreme SuperHyperVertices involve to make a title in the Extreme background of the Neutrosophic SuperHyperGraph. The Neutrosophic SuperHyperGraph is obvious if it has no Extreme SuperHyperEdge but at least two Extreme SuperHyperVertices make the Extreme version of Extreme SuperHyperEdge. Thus in the Extreme setting of non-obvious Neutrosophic SuperHyperGraph, there are at least one Extreme SuperHyperEdge. It's necessary to mention that the word "Simple" is used as Extreme adjective for the initial Neutrosophic SuperHyperGraph, induces there's no Extreme appearance of the loop Extreme version of the Extreme SuperHyperEdge and this Neutrosophic SuperHyperGraph is said to be loopless. The Extreme adjective "loop" on the basic Extreme framework engages one Extreme SuperHyperVertex but it never happens in this Extreme setting. With these Extreme bases, on a Neutrosophic SuperHyperGraph, there's at least one Extreme SuperHyperEdge thus there's at least an Extreme R-SuperHyperConnectivities has the Extreme cardinality of an Extreme SuperHyperEdge. Thus, an Extreme R-SuperHyperConnectivities has the Extreme cardinality at least an Extreme SuperHyperEdge. Assume an Extreme SuperHyperSet $V \setminus V \setminus \{z\}$. This Extreme SuperHyperSet isn't an Extreme R-SuperHyperConnectivities since either the Neutrosophic SuperHyperGraph is an obvious Extreme SuperHyperModel thus it never happens since there's no Extreme usage of this Extreme framework and even more there's no Extreme connection inside or the Neutrosophic SuperHyperGraph isn't obvious and as its consequences, there's an Extreme contradiction with the term "Extreme R-SuperHyperConnectivities" since the maximum Extreme cardinality never happens for this Extreme style of the Extreme SuperHyperSet and beyond that there's no Extreme connection inside as mentioned in first Extreme case in the forms of drawback for this selected Extreme SuperHyperSet. Let

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Comes up. This Extreme case implies having the Extreme style of on-quasi-triangle Extreme style on the every Extreme elements of this Extreme SuperHyperSet. Precisely, the Extreme R-SuperHyperConnectivities is the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that some Extreme amount of the Extreme SuperHyperVertices are on-quasi-triangle Extreme style. The Extreme cardinality of the v SuperHypeSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Is the maximum in comparison to the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But the lower Extreme bound is up. Thus the minimum Extreme cardinality of the maximum Extreme cardinality ends up the Extreme discussion. The first Extreme term refers to the Extreme setting of the Neutrosophic SuperHyperGraph but this key point is enough since there's an Extreme SuperHyperClass of a Neutrosophic SuperHyperGraph has no on-quasi-triangle Extreme style amid some amount of its Extreme SuperHyperVertices. This Extreme setting of the Extreme SuperHyperModel proposes an Extreme SuperHyperSet has only some amount Extreme SuperHyperVertices from one Extreme SuperHyperEdge such that there's no Extreme amount of Extreme SuperHyperEdges more than one involving these some amount of these Extreme SuperHyperVertices. The Extreme cardinality of this Extreme SuperHyperSet is the maximum and the Extreme case is occurred in the minimum Extreme situation. To sum them up, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Has the maximum Extreme cardinality such that

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Contains some Extreme SuperHyperVertices such that there's distinct-covers-order-amount Extreme SuperHyperEdges for amount of Extreme SuperHyperVertices taken from the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

It means that the Extreme SuperHyperSet of the Extreme SuperHyperVertices

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an Extreme R-SuperHyperConnectivities for the Neutrosophic SuperHyperGraph as used Extreme background in the Extreme terms of worst Extreme case and the common theme of the lower Extreme bound occurred in the specific Extreme SuperHyperClasses of the Neutrosophic SuperHyperGraphs which are Extreme free-quasi-triangle.
Assume an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme number of the Extreme SuperHyperVertices. Then every Extreme SuperHyperVertex has at least no Extreme SuperHyperEdge with others in common. Thus those Extreme SuperHyperVertices have the eligibles to be contained in an Extreme R-SuperHyperConnectivities. Those Extreme SuperHyperVertices are potentially included in an Extreme style-R-SuperHyperConnectivities. Formally, consider

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

Are the Extreme SuperHyperVertices of an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus

$$Z_i \sim Z_j, \ i \neq j, \ i, j = 1, 2, \ldots, z.$$

where the $\sim$ isn't an equivalence relation but only the symmetric relation on the Extreme SuperHyperVertices of the Neutrosophic SuperHyperGraph. The formal definition is as follows.

$$Z_i \sim Z_j, \ i \neq j, \ i, j = 1, 2, \ldots, z$$

if and only if Z_i and Z_j are the Extreme SuperHyperVertices and there's only and only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ between the Extreme SuperHyperVertices Z_i and Z_j. The other definition for the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ in the terms of Extreme R-SuperHyperConnectivities is

$$\{a_E, b_E, c_E, \ldots, z_E\}.$$

This definition coincides with the definition of the Extreme R-SuperHyperConnectivities but with slightly differences in the maximum Extreme cardinality amid those Extreme type-SuperHyperSets of the Extreme SuperHyperVertices. Thus the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$\max_z |\{Z_1, Z_2, \ldots, Z_z \mid Z_i \sim Z_j, \ i \neq j, \ i, j = 1, 2, \ldots, z\}|_{\text{Extreme cardinality}},$$

and

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E| = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is formalized with mathematical literatures on the Extreme R-SuperHyperConnectivities. Let $Z_i \overset{E}{\sim} Z_j$, be defined as Z_i and Z_j are the Extreme SuperHyperVertices belong to the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus,

$$E = \{Z_1, Z_2, \ldots, Z_z \mid Z_i \overset{E}{\sim} Z_j, \ i \neq j, \ i, j = 1, 2, \ldots, z\}.$$

Or

$$\{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E| = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But with the slightly differences,

$$\text{Extreme R-SuperHyperConnectivities} =$$
$$\{Z_1, Z_2, \ldots, Z_z \mid \forall i \neq j, \ i, j = 1, 2, \ldots, z, \ \exists E_x, \ Z_i \overset{E_x}{\sim} Z_j, \}.$$

$$\text{Extreme R-SuperHyperConnectivities} =$$
$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E| = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus $E \in E_{ESHG:(V,E)}$ is an Extreme quasi-R-SuperHyperConnectivities where $E \in E_{ESHG:(V,E)}$ is fixed that means $E_x = E \in E_{ESHG:(V,E)}$. for all Extreme intended SuperHyperVertices but in an Extreme SuperHyperConnectivities, $E_x = E \in E_{ESHG:(V,E)}$ could be different and it's not unique. To sum them up, in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. If an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme SuperHyperVertices, then the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

It's straightforward that the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least the maximum Extreme number of Extreme SuperHyperVertices of the Extreme SuperHyperEdges with the maximum number of the Extreme SuperHyperEdges. In other words, the maximum number of the Extreme SuperHyperEdges contains the maximum Extreme number of Extreme SuperHyperVertices are renamed to Extreme SuperHyperConnectivities in some cases but the maximum number of the Extreme SuperHyperEdge with the maximum Extreme number of Extreme SuperHyperVertices, has the Extreme SuperHyperVertices are contained in an Extreme R-SuperHyperConnectivities.
The obvious SuperHyperGraph has no Extreme SuperHyperEdges. But the non-obvious Extreme SuperHyperModel is up. The quasi-SuperHyperModel addresses some issues about the Extreme optimal SuperHyperObject. It specially delivers some remarks on the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that there's distinct amount of Extreme SuperHyperEdges for distinct amount of Extreme SuperHyperVertices up to all taken from that Extreme SuperHyperSet of the Extreme SuperHyperVertices but this Extreme SuperHyperSet of the Extreme SuperHyperVertices is either has the maximum Extreme SuperHyperCardinality or it doesn't have maximum Extreme SuperHyperCardinality. In a non-obvious SuperHyperModel, there's at least one Extreme SuperHyperEdge containing at least all Extreme SuperHyperVertices. Thus it forms an Extreme quasi-R-SuperHyperConnectivities where the Extreme completion of the Extreme incidence is up in that. Thus it's, literarily, an Extreme embedded R-SuperHyperConnectivities. The SuperHyperNotions of embedded SuperHyperSet and quasi-SuperHyperSet coincide. In the original setting, these types of SuperHyperSets only don't satisfy on the maximum SuperHyperCardinality. Thus the embedded setting is elected such that those SuperHyperSets have the maximum Extreme SuperHyperCardinality and they're Extreme SuperHyperOptimal. The less than two distinct types of Extreme SuperHyperVertices are included in the minimum Extreme style of the embedded Extreme R-SuperHyperConnectivities. The interior types of the Extreme SuperHyperVertices are deciders. Since the Extreme number of SuperHyperNeighbors are only affected by the interior Extreme SuperHyperVertices. The common connections, more precise and more formal, the perfect unique connections inside the Extreme SuperHyperSet for any distinct types of Extreme SuperHyperVertices pose the Extreme R-SuperHyperConnectivities. Thus Extreme exterior SuperHyperVertices could be used only in one Extreme SuperHyperEdge and in Extreme SuperHyperRelation with the interior Extreme SuperHyperVertices in that Extreme SuperHyperEdge. In the embedded Extreme SuperHyperConnectivities, there's the usage of exterior Extreme SuperHyperVertices since they've more connections inside more than outside. Thus the title "exterior" is more relevant than the title "interior". One Extreme SuperHyperVertex has no connection, inside. Thus, the Extreme SuperHyperSet of the Extreme SuperHyperVertices with one SuperHyperElement has been ignored in the exploring to lead on the optimal case implying the Extreme R-SuperHyperConnectivities. The Extreme R-SuperHyperConnectivities with the exclusion of the exclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge and with other terms, the Extreme R-SuperHyperConnectivities with the inclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge, is an Extreme quasi-R-SuperHyperConnectivities. To sum them up, in a connected non-obvious Extreme SuperHyperGraph $ESHG : (V, E)$. There's only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only the maximum possibilities of the distinct interior Extreme SuperHyperVertices inside of any given Extreme quasi-R-SuperHyperConnectivities minus all Extreme SuperHypeNeighbor to some of them but not all of them. In other words, there's only an unique Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only two distinct Extreme SuperHyperVertices in an Extreme quasi-R-SuperHyperConnectivities, minus all Extreme

SuperHypeNeighbor to some of them but not all of them.
The main definition of the Extreme R-SuperHyperConnectivities has two titles. an Extreme quasi-R-SuperHyperConnectivities and its corresponded quasi-maximum Extreme R-SuperHyperCardinality are two titles in the terms of quasi-R-styles. For any Extreme number, there's an Extreme quasi-R-SuperHyperConnectivities with that quasi-maximum Extreme SuperHyperCardinality in the terms of the embedded Neutrosophic SuperHyperGraph. If there's an embedded Neutrosophic SuperHyperGraph, then the Extreme quasi-SuperHyperNotions lead us to take the collection of all the Extreme quasi-R-SuperHyperConnectivitiess for all Extreme numbers less than its Extreme corresponded maximum number. The essence of the Extreme SuperHyperConnectivities ends up but this essence starts up in the terms of the Extreme quasi-R-SuperHyperConnectivities, again and more in the operations of collecting all the Extreme quasi-R-SuperHyperConnectivitiess acted on the all possible used formations of the Neutrosophic SuperHyperGraph to achieve one Extreme number. This Extreme number is
considered as the equivalence class for all corresponded quasi-R-SuperHyperConnectivitiess. Let $z_{\text{Extreme Number}}, S_{\text{Extreme SuperHyperSet}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperSet and an Extreme SuperHyperConnectivities. Then

$$[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

As its consequences, the formal definition of the Extreme SuperHyperConnectivities is re-formalized and redefined as follows.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

To get more precise perceptions, the follow-up expressions propose another formal technical definition for the Extreme SuperHyperConnectivities.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

In more concise and more convenient ways, the modified definition for the Extreme SuperHyperConnectivities poses the upcoming expressions.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

To translate the statement to this mathematical literature, the formulae will be revised.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

And then,

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

To get more visions in the closer look-up, there's an overall overlook.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$

$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}.$$

Now, the extension of these types of approaches is up. Since the new term, "Extreme SuperHyperNeighborhood", could be redefined as the collection of the Extreme SuperHyperVertices such that any amount of its Extreme SuperHyperVertices are incident to an Extreme SuperHyperEdge. It's, literarily, another name for "Extreme Quasi-SuperHyperConnectivities" but, precisely, it's the generalization of "Extreme Quasi-SuperHyperConnectivities" since "Extreme Quasi-SuperHyperConnectivities" happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and background but "Extreme SuperHyperNeighborhood" may not happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and preliminarily background since there are some ambiguities about the Extreme SuperHyperCardinality arise from it. To get orderly keywords, the terms, "Extreme SuperHyperNeighborhood", "Extreme Quasi-SuperHyperConnectivities", and "Extreme SuperHyperConnectivities" are up.
Thus, let $z_{\text{Extreme Number}}, N_{\text{Extreme SuperHyperNeighborhood}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperNeighborhood and an Extreme SuperHyperConnectivities and the new terms are up.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

And with go back to initial structure,

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}} \{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max \left\{ |E| \mid E \in E_{ESHG:(V,E)} \right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}} \{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= z_{\text{Extreme Number}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max \left\{ |E| \mid E \in E_{ESHG:(V,E)} \right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}$$
$$= \max \left\{ |E| \mid E \in E_{ESHG:(V,E)} \right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max \left\{ |E| \mid E \in E_{ESHG:(V,E)} \right\}\}.$$

Thus, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices

are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
Assume a connected Extreme SuperHyperGraph $ESHG:(V,E)$. Let an Extreme SuperHyperEdge $ESHE: E\in E_{ESHG:(V,E)}$ has some Extreme SuperHyperVertices r. Consider all Extreme numbers of those Extreme SuperHyperVertices from that Extreme SuperHyperEdge excluding excluding more than r distinct Extreme SuperHyperVertices, exclude to any given Extreme SuperHyperSet of the Extreme SuperHyperVertices. Consider there's an Extreme R-SuperHyperConnectivities with the least cardinality, the lower sharp Extreme bound for Extreme cardinality. Assume a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE}\setminus\{z\}$ is an Extreme SuperHyperSet S of the Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely but it isn't an Extreme R-SuperHyperConnectivities. Since it doesn't have **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some SuperHyperVertices uniquely. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE}\cup\{z\}$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of Extreme SuperHyperVertices but it isn't an Extreme R-SuperHyperConnectivities. Since it **doesn't do** the Extreme procedure such that such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely [there are at least one Extreme SuperHyperVertex outside implying there's, sometimes in the connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$, an Extreme SuperHyperVertex, titled its Extreme SuperHyperNeighbor, to that Extreme SuperHyperVertex in the Extreme SuperHyperSet S so as S doesn't do "the Extreme procedure".]. There's only **one** Extreme SuperHyperVertex **outside** the intended Extreme SuperHyperSet, $V_{ESHE}\cup\{z\}$, in the terms of Extreme SuperHyperNeighborhood. Thus the obvious Extreme R-SuperHyperConnectivities, V_{ESHE} is up. The obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities, V_{ESHE}, **is** an Extreme SuperHyperSet, V_{ESHE}, **includes** only **all** Extreme SuperHyperVertices does forms any kind of Extreme pairs are titled Extreme SuperHyperNeighbors in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices V_{ESHE}, is the **maximum Extreme SuperHyperCardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices **such that** there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely. Thus, in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Any Extreme R-SuperHyperConnectivities only contains all interior Extreme SuperHyperVertices

and all exterior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdge where there's any of them has all possible Extreme SuperHyperNeighbors in and there's all Extreme SuperHyperNeighborhoods in with no exception minus all Extreme SuperHypeNeighbors to some of them not all of them but everything is possible about Extreme SuperHyperNeighborhoods and Extreme SuperHyperNeighbors out.
The SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There are not only **two** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **two** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Doesn't have less than three SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s** **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There aren't only less than three Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$

$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Is the Extreme SuperHyperSet, not:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Does includes only less than three SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. ■

137NSHG21.png

Figure 9.4: an Extreme SuperHyperBipartite Extreme Associated to the Extreme Notions of Extreme SuperHyperConnectivities in the Example (9.0.9)

Example 9.0.9. In the Extreme Figure (9.4), the connected Extreme SuperHyperBipartite $ESHB$: (V, E), is Extreme highlighted and Extreme featured. The obtained Extreme SuperHyperSet, by the Extreme Algorithm in previous Extreme result, of the Extreme SuperHyperVertices of the connected Extreme SuperHyperBipartite $ESHB : (V, E)$, in the Extreme SuperHyperModel (9.4), is the Extreme SuperHyperConnectivities.

Proposition 9.0.10. *Assume a connected Extreme SuperHyperMultipartite $ESHM : (V, E)$. Then an Extreme R-SuperHyperConnectivities is an Extreme SuperHyperSet of the interior Extreme SuperHyperVertices with only no Extreme exception in the Extreme form of interior Extreme SuperHyperVertices from an Extreme SuperHyperPart and only no exception in the form of interior SuperHyperVertices from another SuperHyperPart titled "SuperHyperNeighbors" with neglecting and ignoring more than some of them aren't SuperHyperNeighbors to all. an Extreme R-SuperHyperConnectivities has the Extreme maximum number on all the Extreme summation on the Extreme cardinality of the all Extreme SuperHyperParts form some SuperHyperEdges minus those make Extreme SuperHypeNeighbors to some not all or not unique. Also,*

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{Extreme\ Cardinality}}.$$

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{Extreme\ Cardinality}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Proof. Assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The SuperHyperSet of the SuperHyperVertices $V \setminus V \setminus \{z\}$ isn't a quasi-R-SuperHyperConnectivities since neither amount of Extreme SuperHyperEdges nor amount of SuperHyperVertices where amount refers to the Extreme number of SuperHyperVertices(-/SuperHyperEdges) more than one to form any kind of SuperHyperEdges or any number of SuperHyperEdges. Let us consider the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

This Extreme SuperHyperSet of the Extreme SuperHyperVertices has the eligibilities to propose property such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices but the maximum Extreme cardinality indicates that these Extreme type-SuperHyperSets couldn't give us the Extreme lower bound in the term of Extreme sharpness. In other words, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices implies at least on-quasi-triangle style is up but sometimes the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices is free-quasi-triangle and it doesn't make a contradiction to the supposition on the connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Thus the minimum case never happens in the generality of the connected loopless Neutrosophic SuperHyperGraphs. Thus if we assume in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is a quasi-R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of a quasi-R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Then we've lost some connected loopless Extreme SuperHyperClasses of the connected loopless Neutrosophic SuperHyperGraphs titled free-triangle, on-triangle, and their quasi-types but the SuperHyperStable is only up in this quasi-R-SuperHyperConnectivities. It's the contradiction to that fact on the generality. There are some counterexamples to deny this statement. One of them comes from the setting of the graph titled path and cycle as the counterexamples-classes or reversely direction star as the examples-classes, are well-known classes in that setting and they could be considered as the examples-classes and counterexamples-classes for the tight bound of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Let $V \setminus V \setminus \{z\}$ in mind. There's no necessity on the SuperHyperEdge since we need at least two SuperHyperVertices to form a SuperHyperEdge. It doesn't withdraw the principles of the main definition since there's no condition to be satisfied but the condition is on the existence of the SuperHyperEdge instead of acting on the SuperHyperVertices. In other words, if there's a SuperHyperEdge, then the Extreme SuperHyperSet has the necessary condition for the intended definition to be applied. Thus the $V \setminus V \setminus \{z\}$ is withdrawn not by the conditions of the main definition but by the necessity of the pre-condition on the usage of the main definition.
The Extreme structure of the Extreme R-SuperHyperConnectivities decorates the Extreme SuperHyperVertices don't have received any Extreme connections so as this Extreme style implies different versions of Extreme SuperHyperEdges with the maximum Extreme cardinality in the terms of Extreme SuperHyperVertices are spotlight. The lower Extreme bound is to have the maximum Extreme groups of Extreme SuperHyperVertices have perfect Extreme connections inside each of SuperHyperEdges and the outside of this Extreme SuperHyperSet doesn't matter but regarding the connectedness of the used Neutrosophic SuperHyperGraph arising from its Extreme properties taken from the fact that it's simple. If there's no more than one Extreme SuperHyperVertex in the targeted Extreme SuperHyperSet, then there's no Extreme connection. Furthermore, the Extreme existence of one Extreme SuperHyperVertex has no Extreme effect to talk about the Extreme R-SuperHyperConnectivities. Since at least two Extreme SuperHyperVertices involve to make a title in the Extreme background of the Neutrosophic SuperHyperGraph. The Neutrosophic SuperHyperGraph is obvious if it has no Extreme SuperHyperEdge but at least two Extreme SuperHyperVertices make the Extreme version of Extreme SuperHyperEdge. Thus in the Extreme setting of non-obvious Neutrosophic SuperHyperGraph, there are at least one Extreme SuperHyperEdge. It's necessary to mention that the word "Simple" is used as Extreme adjective for the initial Neutrosophic SuperHyperGraph, induces there's no Extreme appearance of the loop Extreme version of the Extreme SuperHyperEdge and this Neutrosophic SuperHyperGraph is said to be loopless. The Extreme adjective "loop" on the basic Extreme framework engages one Extreme SuperHyperVertex but it never happens in this Extreme setting. With these Extreme bases, on a Neutrosophic SuperHyperGraph, there's at least one Extreme SuperHyperEdge thus there's at least an Extreme R-SuperHyperConnectivities has the Extreme cardinality of an Extreme SuperHyperEdge. Thus, an Extreme R-SuperHyperConnectivities has the Extreme cardinality at least an Extreme SuperHyperEdge. Assume an Extreme SuperHyperSet $V \setminus V \setminus \{z\}$. This Extreme SuperHyperSet isn't an Extreme R-SuperHyperConnectivities since either the Neutrosophic SuperHyperGraph is an obvious Extreme SuperHyperModel thus it never happens since there's no Extreme usage of this Extreme framework and even more there's no Extreme connection inside or the Neutrosophic SuperHyperGraph isn't obvious and as its consequences, there's an Extreme contradiction with the term "Extreme R-SuperHyperConnectivities" since the maximum Extreme cardinality never happens for this Extreme style of the Extreme SuperHyperSet and beyond that there's no Extreme connection inside as mentioned in first Extreme case in the forms of drawback for this selected Extreme SuperHyperSet. Let

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Comes up. This Extreme case implies having the Extreme style of on-quasi-triangle Extreme style on the every Extreme elements of this Extreme SuperHyperSet. Precisely, the Extreme R-SuperHyperConnectivities is the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that some Extreme amount of the Extreme SuperHyperVertices are on-quasi-triangle Extreme style. The Extreme cardinality of the v SuperHypeSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}$$

Is the maximum in comparison to the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

But the lower Extreme bound is up. Thus the minimum Extreme cardinality of the maximum Extreme cardinality ends up the Extreme discussion. The first Extreme term refers to the Extreme setting of the Neutrosophic SuperHyperGraph but this key point is enough since there's an Extreme SuperHyperClass of a Neutrosophic SuperHyperGraph has no on-quasi-triangle Extreme style amid some amount of its Extreme SuperHyperVertices. This Extreme setting of the Extreme SuperHyperModel proposes an Extreme SuperHyperSet has only some amount Extreme SuperHyperVertices from one Extreme SuperHyperEdge such that there's no Extreme amount of Extreme SuperHyperEdges more than one involving these some amount of these Extreme SuperHyperVertices. The Extreme cardinality of this Extreme SuperHyperSet is the maximum and the Extreme case is occurred in the minimum Extreme situation. To sum them up, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Has the maximum Extreme cardinality such that

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Contains some Extreme SuperHyperVertices such that there's distinct-covers-order-amount Extreme SuperHyperEdges for amount of Extreme SuperHyperVertices taken from the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

It means that the Extreme SuperHyperSet of the Extreme SuperHyperVertices

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Is an Extreme R-SuperHyperConnectivities for the Neutrosophic SuperHyperGraph as used Extreme background in the Extreme terms of worst Extreme case and the common theme of the lower Extreme bound occurred in the specific Extreme SuperHyperClasses of the Neutrosophic SuperHyperGraphs which are Extreme free-quasi-triangle.

Assume an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme number of the Extreme SuperHyperVertices. Then every Extreme SuperHyperVertex has at least no Extreme SuperHyperEdge with others in common. Thus those Extreme SuperHyperVertices have the eligibles to be contained in an Extreme R-SuperHyperConnectivities. Those Extreme SuperHyperVertices are potentially included in an Extreme style-R-SuperHyperConnectivities. Formally, consider

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

Are the Extreme SuperHyperVertices of an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus

$$Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z.$$

where the $\sim$ isn't an equivalence relation but only the symmetric relation on the Extreme SuperHyperVertices of the Neutrosophic SuperHyperGraph. The formal definition is as follows.

$$Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z$$

if and only if Z_i and Z_j are the Extreme SuperHyperVertices and there's only and only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ between the Extreme SuperHyperVertices Z_i and Z_j. The other definition for the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ in the terms of Extreme R-SuperHyperConnectivities is

$$\{a_E, b_E, c_E, \ldots, z_E\}.$$

This definition coincides with the definition of the Extreme R-SuperHyperConnectivities but with slightly differences in the maximum Extreme cardinality amid those Extreme type-SuperHyperSets of the Extreme SuperHyperVertices. Thus the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$\max_z |\{Z_1, Z_2, \ldots, Z_z \mid Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z\}|_{\text{Extreme cardinality}},$$

and

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\left\{E \in E_{ESHG:(V,E)} \mid |E| = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\right\}}.$$

is formalized with mathematical literatures on the Extreme R-SuperHyperConnectivities. Let $Z_i \overset{E}{\sim} Z_j$, be defined as Z_i and Z_j are the Extreme SuperHyperVertices belong to the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus,

$$E = \{Z_1, Z_2, \ldots, Z_z \mid Z_i \overset{E}{\sim} Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z\}.$$

Or

$$\{a_E, b_E, c_E, \ldots\}_{E=\left\{E \in E_{ESHG:(V,E)} \mid |E| = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\right\}}.$$

But with the slightly differences,

$$\begin{aligned}&\text{Extreme R-SuperHyperConnectivities} = \\ &\{Z_1, Z_2, \ldots, Z_z \mid \forall i \neq j,\ i,j = 1,2,\ldots,z,\ \exists E_x,\ Z_i \overset{E_x}{\sim} Z_j,\}.\end{aligned}$$

$$\begin{aligned}&\text{Extreme R-SuperHyperConnectivities} = \\ &V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\left\{E \in E_{ESHG:(V,E)} \mid |E| = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\right\}}.\end{aligned}$$

Thus $E \in E_{ESHG:(V,E)}$ is an Extreme quasi-R-SuperHyperConnectivities where $E \in E_{ESHG:(V,E)}$ is fixed that means $E_x = E \in E_{ESHG:(V,E)}$. for all Extreme intended SuperHyperVertices but in an Extreme SuperHyperConnectivities, $E_x = E \in E_{ESHG:(V,E)}$ could be different and it's not unique. To sum them up, in a connected Extreme SuperHyperGraph $ESHG : (V,E)$. If an Extreme

SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme SuperHyperVertices, then the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

It's straightforward that the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least the maximum Extreme number of Extreme SuperHyperVertices of the Extreme SuperHyperEdges with the maximum number of the Extreme SuperHyperEdges. In other words, the maximum number of the Extreme SuperHyperEdges contains the maximum Extreme number of Extreme SuperHyperVertices are renamed to Extreme SuperHyperConnectivities in some cases but the maximum number of the Extreme SuperHyperEdge with the maximum Extreme number of Extreme SuperHyperVertices, has the Extreme SuperHyperVertices are contained in an Extreme R-SuperHyperConnectivities.
The obvious SuperHyperGraph has no Extreme SuperHyperEdges. But the non-obvious Extreme SuperHyperModel is up. The quasi-SuperHyperModel addresses some issues about the Extreme optimal SuperHyperObject. It specially delivers some remarks on the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that there's distinct amount of Extreme SuperHyperEdges for distinct amount of Extreme SuperHyperVertices up to all taken from that Extreme SuperHyperSet of the Extreme SuperHyperVertices but this Extreme SuperHyperSet of the Extreme SuperHyperVertices is either has the maximum Extreme SuperHyperCardinality or it doesn't have maximum Extreme SuperHyperCardinality. In a non-obvious SuperHyperModel, there's at least one Extreme SuperHyperEdge containing at least all Extreme SuperHyperVertices. Thus it forms an Extreme quasi-R-SuperHyperConnectivities where the Extreme completion of the Extreme incidence is up in that. Thus it's, literarily, an Extreme embedded R-SuperHyperConnectivities. The SuperHyperNotions of embedded SuperHyperSet and quasi-SuperHyperSet coincide. In the original setting, these types of SuperHyperSets only don't satisfy on the maximum SuperHyperCardinality. Thus the embedded setting is elected such that those SuperHyperSets have the maximum Extreme SuperHyperCardinality and they're Extreme SuperHyperOptimal. The less than two distinct types of Extreme SuperHyperVertices are included in the minimum Extreme style of the embedded Extreme R-SuperHyperConnectivities. The interior types of the Extreme SuperHyperVertices are deciders. Since the Extreme number of SuperHyperNeighbors are only affected by the interior Extreme SuperHyperVertices. The common connections, more precise and more formal, the perfect unique connections inside the Extreme SuperHyperSet for any distinct types of Extreme SuperHyperVertices pose the Extreme R-SuperHyperConnectivities. Thus Extreme exterior SuperHyperVertices could be used only in one Extreme SuperHyperEdge and in Extreme SuperHyperRelation with the interior Extreme SuperHyperVertices in that Extreme SuperHyperEdge. In the embedded Extreme SuperHyperConnectivities, there's the usage of exterior Extreme SuperHyperVertices since they've more connections inside more than outside. Thus the title "exterior" is more relevant than the title "interior". One Extreme SuperHyperVertex has no connection, inside. Thus, the Extreme SuperHyperSet of the Extreme SuperHyperVertices with one SuperHyperElement has been ignored in the exploring to lead on the optimal case implying the Extreme R-SuperHyperConnectivities. The Extreme R-SuperHyperConnectivities with the exclusion of the exclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge and with other terms, the Extreme R-SuperHyperConnectivities with the inclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge, is an Extreme quasi-R-SuperHyperConnectivities. To sum them up, in a connected non-obvious Extreme SuperHyperGraph $ESHG : (V, E)$. There's only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only the maximum possibilities of the distinct interior

Extreme SuperHyperVertices inside of any given Extreme quasi-R-SuperHyperConnectivities minus all Extreme SuperHypeNeighbor to some of them but not all of them. In other words, there's only an unique Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only two distinct Extreme SuperHyperVertices in an Extreme quasi-R-SuperHyperConnectivities, minus all Extreme SuperHypeNeighbor to some of them but not all of them.
The main definition of the Extreme R-SuperHyperConnectivities has two titles. an Extreme quasi-R-SuperHyperConnectivities and its corresponded quasi-maximum Extreme R-SuperHyperCardinality are two titles in the terms of quasi-R-styles. For any Extreme number, there's an Extreme quasi-R-SuperHyperConnectivities with that quasi-maximum Extreme SuperHyperCardinality in the terms of the embedded Neutrosophic SuperHyperGraph. If there's an embedded Neutrosophic SuperHyperGraph, then the Extreme quasi-SuperHyperNotions lead us to take the collection of all the Extreme quasi-R-SuperHyperConnectivitiess for all Extreme numbers less than its Extreme corresponded maximum number. The essence of the Extreme SuperHyperConnectivities ends up but this essence starts up in the terms of the Extreme quasi-R-SuperHyperConnectivities, again and more in the operations of collecting all the Extreme quasi-R-SuperHyperConnectivitiess acted on the all possible used formations of the Neutrosophic SuperHyperGraph to achieve one Extreme number. This Extreme number is
considered as the equivalence class for all corresponded quasi-R-SuperHyperConnectivitiess. Let $z_{\text{Extreme Number}}, S_{\text{Extreme SuperHyperSet}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperSet and an Extreme SuperHyperConnectivities. Then

$$[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

As its consequences, the formal definition of the Extreme SuperHyperConnectivities is re-formalized and redefined as follows.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

To get more precise perceptions, the follow-up expressions propose another formal technical definition for the Extreme SuperHyperConnectivities.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$

$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

In more concise and more convenient ways, the modified definition for the Extreme SuperHyperConnectivities poses the upcoming expressions.

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

To translate the statement to this mathematical literature, the formulae will be revised.

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

And then,

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

To get more visions in the closer look-up, there's an overall overlook.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid$$
$$S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}},$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid$$
$$S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}},$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= z_{\text{Extreme Number}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

Now, the extension of these types of approaches is up. Since the new term, "Extreme SuperHyperNeighborhood", could be redefined as the collection of the Extreme SuperHyperVertices such that any amount of its Extreme SuperHyperVertices are incident to an Extreme SuperHyperEdge. It's, literarily, another name for "Extreme Quasi-SuperHyperConnectivities" but, precisely, it's the generalization of "Extreme Quasi-SuperHyperConnectivities" since "Extreme Quasi-SuperHyperConnectivities" happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and background but "Extreme SuperHyperNeighborhood" may not happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and preliminarily background since there are some ambiguities about the Extreme SuperHyperCardinality arise from it. To get orderly keywords, the terms, "Extreme SuperHyperNeighborhood", "Extreme Quasi-SuperHyperConnectivities", and "Extreme SuperHyperConnectivities" are up.
Thus, let $z_{\text{Extreme Number}}, N_{\text{Extreme SuperHyperNeighborhood}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperNeighborhood and an Extreme SuperHyperConnectivities and the new terms are up.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} = \{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}} [z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}} \{N_{\text{Extreme SuperHyperNeighborhood}} \mid |N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

And with go back to initial structure,

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max\Big\{|E| \mid E \in E_{ESHG:(V,E)}\Big\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= z_{\text{Extreme Number}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max\Big\{|E| \mid E \in E_{ESHG:(V,E)}\Big\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}$$
$$= \max\Big\{|E| \mid E \in E_{ESHG:(V,E)}\Big\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\Big\{|E| \mid E \in E_{ESHG:(V,E)}\Big\}\}.$$

Thus, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices

are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up. The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
Assume a connected Extreme SuperHyperGraph $ESHG:(V,E)$. Let an Extreme SuperHyperEdge $ESHE: E \in E_{ESHG:(V,E)}$ has some Extreme SuperHyperVertices r. Consider all Extreme numbers of those Extreme SuperHyperVertices from that Extreme SuperHyperEdge excluding excluding more than r distinct Extreme SuperHyperVertices, exclude to any given Extreme SuperHyperSet of the Extreme SuperHyperVertices. Consider there's an Extreme R-SuperHyperConnectivities with the least cardinality, the lower sharp Extreme bound for Extreme cardinality. Assume a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE} \setminus \{z\}$ is an Extreme SuperHyperSet S of the Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely but it isn't an Extreme R-SuperHyperConnectivities. Since it doesn't have **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some SuperHyperVertices uniquely. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE} \cup \{z\}$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of Extreme SuperHyperVertices but it isn't an Extreme R-SuperHyperConnectivities. Since it **doesn't do** the Extreme procedure such that such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely [there are at least one Extreme SuperHyperVertex outside implying there's, sometimes in the connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$, an Extreme SuperHyperVertex, titled its Extreme SuperHyperNeighbor, to that Extreme SuperHyperVertex in the Extreme SuperHyperSet S so as S doesn't do "the Extreme procedure".]. There's only **one** Extreme SuperHyperVertex **outside** the intended Extreme SuperHyperSet, $V_{ESHE} \cup \{z\}$, in the terms of Extreme SuperHyperNeighborhood. Thus the obvious Extreme R-SuperHyperConnectivities, V_{ESHE} is up. The obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities, V_{ESHE}, **is** an Extreme SuperHyperSet, V_{ESHE}, **includes** only **all** Extreme SuperHyperVertices does forms any kind of Extreme pairs are titled Extreme SuperHyperNeighbors in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices V_{ESHE}, is the **maximum Extreme SuperHyperCardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices **such that** there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely. Thus, in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Any Extreme R-SuperHyperConnectivities only contains all interior Extreme SuperHyperVertices

and all exterior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdge where there's any of them has all possible Extreme SuperHyperNeighbors in and there's all Extreme SuperHyperNeighborhoods in with no exception minus all Extreme SuperHypeNeighbors to some of them not all of them but everything is possible about Extreme SuperHyperNeighborhoods and Extreme SuperHyperNeighbors out.
The SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&=\{E_{2i-1}\}_{i=1}^{\min|P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&=z^{\min|P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities}=\{V_i\}_{i=1}^{s}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial}=az^{s}.
\end{aligned}$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&=\{E_{2i-1}\}_{i=1}^{\min|P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&=z^{\min|P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities}=\{V_i\}_{i=1}^{s}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial}=az^{s}.
\end{aligned}$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG:(V,E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There are not only **two** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **two** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}\\
&=\{E_{2i-1}\}_{i=1}^{\min|P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.\\
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&=z^{\min|P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities}=\{V_i\}_{i=1}^{s}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial}=az^{s}.
\end{aligned}$$

Doesn't have less than three SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There aren't only less than three Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$

$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Is the Extreme SuperHyperSet, not:

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

Does includes only less than three SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

“Extreme SuperHyperConnectivities”

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= z^{\min |P_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. ■

Figure 9.5: an Extreme SuperHyperMultipartite Associated to the Notions of Extreme SuperHyperConnectivities in the Example (9.0.11)

Example 9.0.11. In the Figure (9.5), the connected Extreme SuperHyperMultipartite $ESHM : (V, E)$, is highlighted and Extreme featured. The obtained Extreme SuperHyperSet, by the Algorithm in previous Extreme result, of the Extreme SuperHyperVertices of the connected Extreme SuperHyperMultipartite $ESHM : (V, E)$, in the Extreme SuperHyperModel (9.5), is the Extreme SuperHyperConnectivities.

Proposition 9.0.12. *Assume a connected Extreme SuperHyperWheel $ESHW : (V, E)$. Then an Extreme R-SuperHyperConnectivities is an Extreme SuperHyperSet of the interior Extreme SuperHyperVertices, excluding the Extreme SuperHyperCenter, with only no exception in the form of interior Extreme SuperHyperVertices from same Extreme SuperHyperEdge with the exclusion on Extreme SuperHypeNeighbors to some of them and not all. an Extreme R-SuperHyperConnectivities has the Extreme maximum number on all the Extreme number of all the Extreme SuperHyperEdges don't have common Extreme SuperHyperNeighbors. Also,*

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{Extreme\ Cardinality}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$

$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{Extreme\ Cardinality}}{2} \rfloor}.$

$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$

$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$

Proof. Assume a connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The SuperHyperSet of the SuperHyperVertices $V \setminus V \setminus \{z\}$ isn't a quasi-R-SuperHyperConnectivities since neither amount of Extreme SuperHyperEdges nor amount of SuperHyperVertices where amount refers to the Extreme number of SuperHyperVertices(-/SuperHyperEdges) more than one to form any kind of SuperHyperEdges or any number of SuperHyperEdges. Let us consider the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

This Extreme SuperHyperSet of the Extreme SuperHyperVertices has the eligibilities to propose property such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices but the maximum Extreme cardinality indicates that these Extreme type-SuperHyperSets couldn't give us the Extreme lower bound in the term of Extreme sharpness. In other words, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices implies at least on-quasi-triangle style is up but sometimes the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

of the Extreme SuperHyperVertices is free-quasi-triangle and it doesn't make a contradiction to the supposition on the connected loopless Neutrosophic SuperHyperGraph $ESHG : (V, E)$. Thus the minimum case never happens in the generality of the connected loopless Neutrosophic SuperHyperGraphs. Thus if we assume in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is a quasi-R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of a quasi-R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Then we've lost some connected loopless Extreme SuperHyperClasses of the connected loopless Neutrosophic SuperHyperGraphs titled free-triangle, on-triangle, and their quasi-types but the SuperHyperStable is only up in this quasi-R-SuperHyperConnectivities. It's the contradiction to that fact on the generality. There are some counterexamples to deny this statement. One of them comes from the setting of the graph titled path and cycle as the counterexamples-classes or reversely direction star as the examples-classes, are well-known classes in that setting and they could be considered as the examples-classes and counterexamples-classes for the tight bound of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Let $V \setminus V \setminus \{z\}$ in mind. There's no necessity on the SuperHyperEdge since we need at least two SuperHyperVertices to form a SuperHyperEdge. It doesn't withdraw the principles of the main definition since there's no condition to be satisfied but the condition is on the existence of the SuperHyperEdge instead of acting on the SuperHyperVertices. In other words, if there's a SuperHyperEdge, then the Extreme SuperHyperSet has the necessary condition for the intended definition to be applied. Thus the $V \setminus V \setminus \{z\}$ is withdrawn not by the conditions of the main definition but by the necessity of the pre-condition on the usage of the main definition.
The Extreme structure of the Extreme R-SuperHyperConnectivities decorates the Extreme SuperHyperVertices don't have received any Extreme connections so as this Extreme style implies different versions of Extreme SuperHyperEdges with the maximum Extreme cardinality in the terms of Extreme SuperHyperVertices are spotlight. The lower Extreme bound is to have the maximum Extreme groups of Extreme SuperHyperVertices have perfect Extreme connections inside each of SuperHyperEdges and the outside of this Extreme SuperHyperSet doesn't matter but regarding the connectedness of the used Neutrosophic SuperHyperGraph arising from its Extreme properties taken from the fact that it's simple. If there's no more than one Extreme SuperHyperVertex in the targeted Extreme SuperHyperSet, then there's no Extreme connection. Furthermore, the Extreme existence of one Extreme SuperHyperVertex has no Extreme effect to talk about the Extreme R-SuperHyperConnectivities. Since at least two Extreme SuperHyperVertices involve to make a title in the Extreme background of the Neutrosophic SuperHyperGraph. The Neutrosophic SuperHyperGraph is obvious if it has no Extreme SuperHyperEdge but at least two Extreme SuperHyperVertices make the Extreme version of Extreme SuperHyperEdge. Thus in the Extreme setting of non-obvious Neutrosophic SuperHyperGraph, there are at least one Extreme SuperHyperEdge. It's necessary to mention that the word "Simple" is used as Extreme adjective for the initial Neutrosophic SuperHyperGraph, induces there's no Extreme appearance of the loop Extreme version of the Extreme SuperHyperEdge and this Neutrosophic SuperHyperGraph is said to be loopless. The Extreme adjective "loop" on the basic Extreme framework engages one Extreme SuperHyperVertex but it never happens in this Extreme setting. With these Extreme bases, on a Neutrosophic SuperHyperGraph, there's at least one Extreme SuperHyperEdge thus there's at least an Extreme R-SuperHyperConnectivities has the Extreme cardinality of an Extreme SuperHyperEdge. Thus, an Extreme R-SuperHyperConnectivities has the Extreme cardinality at least an Extreme SuperHyperEdge. Assume an Extreme SuperHyperSet $V \setminus V \setminus \{z\}$. This Extreme SuperHyperSet isn't an Extreme R-SuperHyperConnectivities since either the Neutrosophic SuperHyperGraph is an obvious Extreme SuperHyperModel thus it never happens since there's no Extreme usage of this Extreme framework and even more there's no Extreme connection inside or the Neutrosophic SuperHyperGraph isn't obvious and as its consequences, there's an Extreme contradiction with the term "Extreme R-SuperHyperConnectivities" since the maximum Extreme cardinality never happens for this Extreme style of the Extreme SuperHyperSet and beyond that there's no Extreme connection inside as mentioned in first Extreme case in the forms of drawback for this selected Extreme SuperHyperSet. Let

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Comes up. This Extreme case implies having the Extreme style of on-quasi-triangle Extreme style on the every Extreme elements of this Extreme SuperHyperSet. Precisely, the Extreme R-SuperHyperConnectivities is the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that some Extreme amount of the Extreme SuperHyperVertices are on-quasi-triangle Extreme style. The Extreme cardinality of the v SuperHypeSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots, a_{E'}, b_{E'}, c_{E'}, \ldots\}_{E,E'=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}$$

Is the maximum in comparison to the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But the lower Extreme bound is up. Thus the minimum Extreme cardinality of the maximum Extreme cardinality ends up the Extreme discussion. The first Extreme term refers to the Extreme setting of the Neutrosophic SuperHyperGraph but this key point is enough since there's an Extreme SuperHyperClass of a Neutrosophic SuperHyperGraph has no on-quasi-triangle Extreme style amid some amount of its Extreme SuperHyperVertices. This Extreme setting of the Extreme SuperHyperModel proposes an Extreme SuperHyperSet has only some amount Extreme SuperHyperVertices from one Extreme SuperHyperEdge such that there's no Extreme amount of Extreme SuperHyperEdges more than one involving these some amount of these Extreme SuperHyperVertices. The Extreme cardinality of this Extreme SuperHyperSet is the maximum and the Extreme case is occurred in the minimum Extreme situation. To sum them up, the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Has the maximum Extreme cardinality such that

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Contains some Extreme SuperHyperVertices such that there's distinct-covers-order-amount Extreme SuperHyperEdges for amount of Extreme SuperHyperVertices taken from the Extreme SuperHyperSet

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

It means that the Extreme SuperHyperSet of the Extreme SuperHyperVertices

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an Extreme R-SuperHyperConnectivities for the Neutrosophic SuperHyperGraph as used Extreme background in the Extreme terms of worst Extreme case and the common theme of the lower Extreme bound occurred in the specific Extreme SuperHyperClasses of the Neutrosophic SuperHyperGraphs which are Extreme free-quasi-triangle.
Assume an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme number of the Extreme SuperHyperVertices. Then every Extreme SuperHyperVertex has at least no Extreme SuperHyperEdge with others in common. Thus those Extreme SuperHyperVertices have the eligibles to be contained in an Extreme R-SuperHyperConnectivities. Those Extreme SuperHyperVertices are potentially included in an Extreme style-R-SuperHyperConnectivities. Formally, consider

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

Are the Extreme SuperHyperVertices of an Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus

$$Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z.$$

where the $\sim$ isn't an equivalence relation but only the symmetric relation on the Extreme SuperHyperVertices of the Neutrosophic SuperHyperGraph. The formal definition is as follows.

$$Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z$$

if and only if Z_i and Z_j are the Extreme SuperHyperVertices and there's only and only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ between the Extreme SuperHyperVertices Z_i and Z_j. The other definition for the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ in the terms of Extreme R-SuperHyperConnectivities is

$$\{a_E, b_E, c_E, \ldots, z_E\}.$$

This definition coincides with the definition of the Extreme R-SuperHyperConnectivities but with slightly differences in the maximum Extreme cardinality amid those Extreme type-SuperHyperSets of the Extreme SuperHyperVertices. Thus the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$\max_z |\{Z_1, Z_2, \ldots, Z_z \mid Z_i \sim Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z\}|_{\text{Extreme cardinality}},$$

and

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E| = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is formalized with mathematical literatures on the Extreme R-SuperHyperConnectivities. Let $Z_i \overset{E}{\sim} Z_j$, be defined as Z_i and Z_j are the Extreme SuperHyperVertices belong to the Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$. Thus,

$$E = \{Z_1, Z_2, \ldots, Z_z \mid Z_i \overset{E}{\sim} Z_j,\ i \neq j,\ i,j = 1,2,\ldots,z\}.$$

Or

$$\{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E| = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

But with the slightly differences,

$$\text{Extreme R-SuperHyperConnectivities} =$$
$$\{Z_1, Z_2, \ldots, Z_z \mid \forall i \neq j,\ i,j = 1,2,\ldots,z,\ \exists E_x,\ Z_i \overset{E_x}{\sim} Z_j,\}.$$

$$\text{Extreme R-SuperHyperConnectivities} =$$
$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E| = \max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus $E \in E_{ESHG:(V,E)}$ is an Extreme quasi-R-SuperHyperConnectivities where $E \in E_{ESHG:(V,E)}$ is fixed that means $E_x = E \in E_{ESHG:(V,E)}$. for all Extreme intended SuperHyperVertices but in an Extreme SuperHyperConnectivities, $E_x = E \in E_{ESHG:(V,E)}$ could be different and it's not unique. To sum them up, in a connected Extreme SuperHyperGraph $ESHG : (V,E)$. If an Extreme

SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has z Extreme SuperHyperVertices, then the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least

$$V \setminus (V \setminus \{a_E, b_E, c_E, \ldots, z_E\}).$$

It's straightforward that the Extreme cardinality of the Extreme R-SuperHyperConnectivities is at least the maximum Extreme number of Extreme SuperHyperVertices of the Extreme SuperHyperEdges with the maximum number of the Extreme SuperHyperEdges. In other words, the maximum number of the Extreme SuperHyperEdges contains the maximum Extreme number of Extreme SuperHyperVertices are renamed to Extreme SuperHyperConnectivities in some cases but the maximum number of the Extreme SuperHyperEdge with the maximum Extreme number of Extreme SuperHyperVertices, has the Extreme SuperHyperVertices are contained in an Extreme R-SuperHyperConnectivities.
The obvious SuperHyperGraph has no Extreme SuperHyperEdges. But the non-obvious Extreme SuperHyperModel is up. The quasi-SuperHyperModel addresses some issues about the Extreme optimal SuperHyperObject. It specially delivers some remarks on the Extreme SuperHyperSet of the Extreme SuperHyperVertices such that there's distinct amount of Extreme SuperHyperEdges for distinct amount of Extreme SuperHyperVertices up to all taken from that Extreme SuperHyperSet of the Extreme SuperHyperVertices but this Extreme SuperHyperSet of the Extreme SuperHyperVertices is either has the maximum Extreme SuperHyperCardinality or it doesn't have maximum Extreme SuperHyperCardinality. In a non-obvious SuperHyperModel, there's at least one Extreme SuperHyperEdge containing at least all Extreme SuperHyperVertices. Thus it forms an Extreme quasi-R-SuperHyperConnectivities where the Extreme completion of the Extreme incidence is up in that. Thus it's, literarily, an Extreme embedded R-SuperHyperConnectivities. The SuperHyperNotions of embedded SuperHyperSet and quasi-SuperHyperSet coincide. In the original setting, these types of SuperHyperSets only don't satisfy on the maximum SuperHyperCardinality. Thus the embedded setting is elected such that those SuperHyperSets have the maximum Extreme SuperHyperCardinality and they're Extreme SuperHyperOptimal. The less than two distinct types of Extreme SuperHyperVertices are included in the minimum Extreme style of the embedded Extreme R-SuperHyperConnectivities. The interior types of the Extreme SuperHyperVertices are deciders. Since the Extreme number of SuperHyperNeighbors are only affected by the interior Extreme SuperHyperVertices. The common connections, more precise and more formal, the perfect unique connections inside the Extreme SuperHyperSet for any distinct types of Extreme SuperHyperVertices pose the Extreme R-SuperHyperConnectivities. Thus Extreme exterior SuperHyperVertices could be used only in one Extreme SuperHyperEdge and in Extreme SuperHyperRelation with the interior Extreme SuperHyperVertices in that Extreme SuperHyperEdge. In the embedded Extreme SuperHyperConnectivities, there's the usage of exterior Extreme SuperHyperVertices since they've more connections inside more than outside. Thus the title "exterior" is more relevant than the title "interior". One Extreme SuperHyperVertex has no connection, inside. Thus, the Extreme SuperHyperSet of the Extreme SuperHyperVertices with one SuperHyperElement has been ignored in the exploring to lead on the optimal case implying the Extreme R-SuperHyperConnectivities. The Extreme R-SuperHyperConnectivities with the exclusion of the exclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge and with other terms, the Extreme R-SuperHyperConnectivities with the inclusion of all Extreme SuperHyperVertices in one Extreme SuperHyperEdge, is an Extreme quasi-R-SuperHyperConnectivities. To sum them up, in a connected non-obvious Extreme SuperHyperGraph $ESHG : (V, E)$. There's only one Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only the maximum possibilities of the distinct interior

Extreme SuperHyperVertices inside of any given Extreme quasi-R-SuperHyperConnectivities minus all Extreme SuperHypeNeighbor to some of them but not all of them. In other words, there's only an unique Extreme SuperHyperEdge $E \in E_{ESHG:(V,E)}$ has only two distinct Extreme SuperHyperVertices in an Extreme quasi-R-SuperHyperConnectivities, minus all Extreme SuperHypeNeighbor to some of them but not all of them.
The main definition of the Extreme R-SuperHyperConnectivities has two titles. an Extreme quasi-R-SuperHyperConnectivities and its corresponded quasi-maximum Extreme R-SuperHyperCardinality are two titles in the terms of quasi-R-styles. For any Extreme number, there's an Extreme quasi-R-SuperHyperConnectivities with that quasi-maximum Extreme SuperHyperCardinality in the terms of the embedded Neutrosophic SuperHyperGraph. If there's an embedded Neutrosophic SuperHyperGraph, then the Extreme quasi-SuperHyperNotions lead us to take the collection of all the Extreme quasi-R-SuperHyperConnectivitiess for all Extreme numbers less than its Extreme corresponded maximum number. The essence of the Extreme SuperHyperConnectivities ends up but this essence starts up in the terms of the Extreme quasi-R-SuperHyperConnectivities, again and more in the operations of collecting all the Extreme quasi-R-SuperHyperConnectivitiess acted on the all possible used formations of the Neutrosophic SuperHyperGraph to achieve one Extreme number. This Extreme number is
considered as the equivalence class for all corresponded quasi-R-SuperHyperConnectivitiess. Let $z_{\text{Extreme Number}}, S_{\text{Extreme SuperHyperSet}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperSet and an Extreme SuperHyperConnectivities. Then

$$[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

As its consequences, the formal definition of the Extreme SuperHyperConnectivities is re-formalized and redefined as follows.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}}\}.$$

To get more precise perceptions, the follow-up expressions propose another formal technical definition for the Extreme SuperHyperConnectivities.

$$G_{\text{Extreme SuperHyperConnectivities}} = \{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} = \cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}}, |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = z_{\text{Extreme Number}} \mid |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$

$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

In more concise and more convenient ways, the modified definition for the Extreme SuperHyperConnectivities poses the upcoming expressions.

$$\begin{aligned}&G_{\text{Extreme SuperHyperConnectivities}} =\\&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid\\&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}\\&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.\end{aligned}$$

To translate the statement to this mathematical literature, the formulae will be revised.

$$\begin{aligned}&G_{\text{Extreme SuperHyperConnectivities}} =\\&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid\\&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}\\&= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\\&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.\end{aligned}$$

And then,

$$\begin{aligned}&G_{\text{Extreme SuperHyperConnectivities}} =\\&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid\\&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}\\&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.\end{aligned}$$

To get more visions in the closer look-up, there's an overall overlook.

$$\begin{aligned}&G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =\\&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid\\&\ S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}},\\&\ |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}\\&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.\end{aligned}$$

$$\begin{aligned}&G_{\text{Extreme SuperHyperConnectivities}} =\\&\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =\\&\cup_{z_{\text{Extreme Number}}}\{S_{\text{Extreme SuperHyperSet}} \mid\\&\ S_{\text{Extreme SuperHyperSet}} = G_{\text{Extreme SuperHyperConnectivities}},\\&\ |S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}\\&= z_{\text{Extreme Number}} \mid\\&|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}\\&= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.\end{aligned}$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{S \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|S_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

Now, the extension of these types of approaches is up. Since the new term, "Extreme SuperHyperNeighborhood", could be redefined as the collection of the Extreme SuperHyperVertices such that any amount of its Extreme SuperHyperVertices are incident to an Extreme SuperHyperEdge. It's, literarily, another name for "Extreme Quasi-SuperHyperConnectivities" but, precisely, it's the generalization of "Extreme Quasi-SuperHyperConnectivities" since "Extreme Quasi-SuperHyperConnectivities" happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and background but "Extreme SuperHyperNeighborhood" may not happens "Extreme SuperHyperConnectivities" in a Neutrosophic SuperHyperGraph as initial framework and preliminarily background since there are some ambiguities about the Extreme SuperHyperCardinality arise from it. To get orderly keywords, the terms, "Extreme SuperHyperNeighborhood", "Extreme Quasi-SuperHyperConnectivities", and "Extreme SuperHyperConnectivities" are up.
Thus, let $z_{\text{Extreme Number}}, N_{\text{Extreme SuperHyperNeighborhood}}$ and $G_{\text{Extreme SuperHyperConnectivities}}$ be an Extreme number, an Extreme SuperHyperNeighborhood and an Extreme SuperHyperConnectivities and the new terms are up.

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= z_{\text{Extreme Number}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}} = \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}\}.$$

And with go back to initial structure,

$$G_{\text{Extreme SuperHyperConnectivities}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} =$$
$$\cup_{z_{\text{Extreme Number}}}\{N_{\text{Extreme SuperHyperNeighborhood}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= z_{\text{Extreme Number}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperNeighborhood}}|_{\text{Extreme Cardinality}}$$
$$= \max_{[z_{\text{Extreme Number}}]_{\text{Extreme Class}}} z_{\text{Extreme Number}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

$$G_{\text{Extreme SuperHyperConnectivities}} =$$
$$\{N_{\text{Extreme SuperHyperNeighborhood}} \in \cup_{z_{\text{Extreme Number}}}[z_{\text{Extreme Number}}]_{\text{Extreme Class}} \mid$$
$$|N_{\text{Extreme SuperHyperSet}}|_{\text{Extreme Cardinality}}$$
$$= \max\left\{|E| \mid E \in E_{ESHG:(V,E)}\right\}\}.$$

Thus, in a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices

are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
To make sense with the precise words in the terms of "R-', the follow-up illustrations are coming up.
The following Extreme SuperHyperSet of Extreme SuperHyperVertices is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities.

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

The Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is an **Extreme R-SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge amid some Extreme SuperHyperVertices instead of all given by **Extreme SuperHyperConnectivities** is related to the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

There's not only **one** Extreme SuperHyperVertex **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **one** Extreme SuperHyperVertex. But the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

doesn't have less than two SuperHyperVertices **inside** the intended Extreme SuperHyperSet since they've come from at least so far an SuperHyperEdge. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of Extreme SuperHyperVertices,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices,

$$(V \setminus V \setminus \{x, z\}) \cup \{xy\}$$

or

$$(V \setminus V \setminus \{x, z\}) \cup \{zy\}$$

is an Extreme R-SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some amount Extreme SuperHyperVertices instead of all given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities. There isn't only less than two Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Thus the non-obvious Extreme R-SuperHyperConnectivities,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

is up. The non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

Is the Extreme SuperHyperSet, not:

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

does includes only less than two SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$ but it's impossible in the case, they've corresponded to an SuperHyperEdge. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme R-SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme R-SuperHyperConnectivities,

is only and only

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$ with a illustrated SuperHyperModeling. It's also, not only an Extreme free-triangle embedded SuperHyperModel and an Extreme on-triangle embedded SuperHyperModel but also it's an Extreme stable embedded SuperHyperModel. But all only non-obvious simple Extreme type-SuperHyperSets of the Extreme R-SuperHyperConnectivities amid those obvious simple Extreme type-SuperHyperSets of the Extreme SuperHyperConnectivities, are

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E \in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E \in E_{ESHG:(V,E)}\}\}}.$$

In a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$.
To sum them up, assume a connected loopless Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Then in the worst case, literally,

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

is an Extreme R-SuperHyperConnectivities. In other words, the least cardinality, the lower sharp bound for the cardinality, of an Extreme R-SuperHyperConnectivities is the cardinality of

$$V \setminus V \setminus \{a_E, b_E, c_E, \ldots\}_{E=\{E\in E_{ESHG:(V,E)} \mid |E|=\max\{|E| \mid E\in E_{ESHG:(V,E)}\}\}}.$$

To sum them up, in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The all interior Extreme SuperHyperVertices belong to any Extreme quasi-R-SuperHyperConnectivities if for any of them, and any of other corresponded Extreme SuperHyperVertex, some interior Extreme SuperHyperVertices are mutually Extreme SuperHyperNeighbors with no Extreme exception at all minus all Extreme SuperHypeNeighbors to any amount of them.
Assume a connected Extreme SuperHyperGraph $ESHG:(V,E)$. Let an Extreme SuperHyperEdge $ESHE : E\in E_{ESHG:(V,E)}$ has some Extreme SuperHyperVertices r. Consider all Extreme numbers of those Extreme SuperHyperVertices from that Extreme SuperHyperEdge excluding excluding more than r distinct Extreme SuperHyperVertices, exclude to any given Extreme SuperHyperSet of the Extreme SuperHyperVertices. Consider there's an Extreme R-SuperHyperConnectivities with the least cardinality, the lower sharp Extreme bound for Extreme cardinality. Assume a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE}\setminus\{z\}$ is an Extreme SuperHyperSet S of the Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely but it isn't an Extreme R-SuperHyperConnectivities. Since it doesn't have **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's an Extreme SuperHyperEdge to have some SuperHyperVertices uniquely. The Extreme SuperHyperSet of the Extreme SuperHyperVertices $V_{ESHE}\cup\{z\}$ is the maximum Extreme cardinality of an Extreme SuperHyperSet S of Extreme SuperHyperVertices but it isn't an Extreme R-SuperHyperConnectivities. Since it **doesn't do** the Extreme procedure such that such that there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely [there are at least one Extreme SuperHyperVertex outside implying there's, sometimes in the connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$, an Extreme SuperHyperVertex, titled its Extreme SuperHyperNeighbor, to that Extreme SuperHyperVertex in the Extreme SuperHyperSet S so as S doesn't do "the Extreme procedure".]. There's only **one** Extreme SuperHyperVertex **outside** the intended Extreme SuperHyperSet, $V_{ESHE}\cup\{z\}$, in the terms of Extreme SuperHyperNeighborhood. Thus the obvious Extreme R-SuperHyperConnectivities, V_{ESHE} is up. The obvious simple Extreme type-SuperHyperSet of the Extreme R-SuperHyperConnectivities, V_{ESHE}, **is** an Extreme SuperHyperSet, V_{ESHE}, **includes** only **all** Extreme SuperHyperVertices does forms any kind of Extreme pairs are titled Extreme SuperHyperNeighbors in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Since the Extreme SuperHyperSet of the Extreme SuperHyperVertices V_{ESHE}, is the **maximum Extreme SuperHyperCardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperVertices **such that** there's an Extreme SuperHyperEdge to have some Extreme SuperHyperVertices uniquely. Thus, in a connected Neutrosophic SuperHyperGraph $ESHG:(V,E)$. Any Extreme R-SuperHyperConnectivities only contains all interior Extreme SuperHyperVertices

and all exterior Extreme SuperHyperVertices from the unique Extreme SuperHyperEdge where there's any of them has all possible Extreme SuperHyperNeighbors in and there's all Extreme SuperHyperNeighborhoods in with no exception minus all Extreme SuperHypeNeighbors to some of them not all of them but everything is possible about Extreme SuperHyperNeighborhoods and Extreme SuperHyperNeighbors out.
The SuperHyperNotion, namely, SuperHyperConnectivities, is up. There's neither empty SuperHyperEdge nor loop SuperHyperEdge. The following Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices] is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of Extreme SuperHyperEdges[SuperHyperVertices],

$$\begin{aligned}
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.
\end{aligned}$$

is the simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. The Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\begin{aligned}
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.
\end{aligned}$$

Is an **Extreme SuperHyperConnectivities** $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is an Extreme type-SuperHyperSet with **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There are not only **two** Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious Extreme SuperHyperConnectivities is up. The obvious simple Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities is an Extreme SuperHyperSet **includes** only **two** Extreme SuperHyperVertices. But the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\begin{aligned}
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.
\end{aligned}$$

$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Doesn't have less than three SuperHyperVertices **inside** the intended Extreme SuperHyperSet. Thus the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities **is** up. To sum them up, the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Is the non-obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities. Since the Extreme SuperHyperSet of the Extreme SuperHyperEdges[SuperHyperVertices],

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Is an Extreme SuperHyperConnectivities $\mathcal{C}(ESHG)$ for an Neutrosophic SuperHyperGraph $ESHG : (V, E)$ is the Extreme SuperHyperSet S of Extreme SuperHyperVertices such that there's no an Extreme SuperHyperEdge for some Extreme SuperHyperVertices given by that Extreme type-SuperHyperSet called the Extreme SuperHyperConnectivities **and** it's an Extreme **SuperHyperConnectivities**. Since it**'s** **the maximum Extreme cardinality** of an Extreme SuperHyperSet S of Extreme SuperHyperEdges[SuperHyperVertices] such that there's no Extreme SuperHyperVertex of an Extreme SuperHyperEdge is common and there's an Extreme SuperHyperEdge for all Extreme SuperHyperVertices. There aren't only less than three Extreme SuperHyperVertices **inside** the intended Extreme SuperHyperSet,

$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivities}$$
$$= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}$$
$$= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.$$
$$\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^s + bz^t.$$

Thus the non-obvious Extreme SuperHyperConnectivities,

$$\begin{aligned}
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.\\
&\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities SuperHyperPolynomial} = az^s + bz^t.
\end{aligned}$$

Is up. The obvious simple Extreme type-SuperHyperSet of the Extreme SuperHyperConnectivities, not:

$$\begin{aligned}
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.\\
&\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities SuperHyperPolynomial} = az^s + bz^t.
\end{aligned}$$

Is the Extreme SuperHyperSet, not:

$$\begin{aligned}
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities SuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.\\
&\mathcal{C}(NSHG)_{Extreme R-Quasi-SuperHyperConnectivities SuperHyperPolynomial} = az^s + bz^t.
\end{aligned}$$

Does includes only less than three SuperHyperVertices in a connected Extreme SuperHyperGraph $ESHG : (V, E)$. It's interesting to mention that the only non-obvious simple Extreme type-SuperHyperSet called the

"Extreme SuperHyperConnectivities"

amid those obvious[non-obvious] simple Extreme type-SuperHyperSets called the

Extreme SuperHyperConnectivities,

is only and only

$$\begin{aligned}
&\mathcal{C}(NSHG)_{Extreme Quasi-SuperHyperConnectivities}\\
&= \{E_{2i-1}\}_{i=1}^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.
\end{aligned}$$

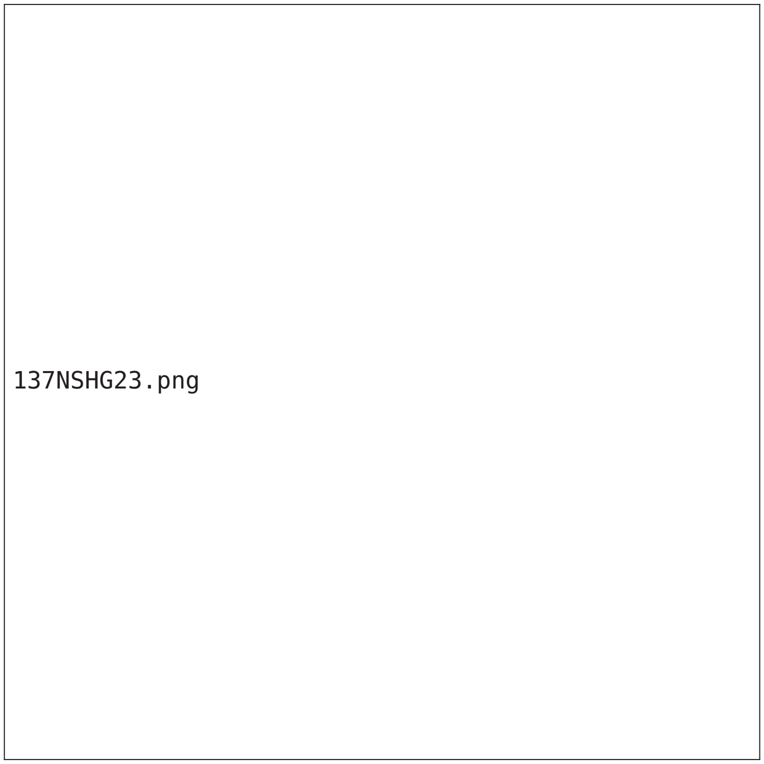


Figure 9.6: an Extreme SuperHyperWheel Extreme Associated to the Extreme Notions of Extreme SuperHyperConnectivities in the Extreme Example (9.0.13)

$$
\begin{aligned}
&\mathcal{C}(NSHG)_{ExtremeQuasi-SuperHyperConnectivitiesSuperHyperPolynomial}\\
&= 2z^{\lfloor \frac{|E_{ESHG:(V,E)}|_{\text{Extreme Cardinality}}}{2} \rfloor}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivities} = \{V_i\}_{i=1}^{s}, \{V_j\}_{j=1}^{t}.\\
&\mathcal{C}(NSHG)_{ExtremeR-Quasi-SuperHyperConnectivitiesSuperHyperPolynomial} = az^{s} + bz^{t}.
\end{aligned}
$$

In a connected Neutrosophic SuperHyperGraph $ESHG : (V, E)$. ■

Example 9.0.13. In the Extreme Figure (9.6), the connected Extreme SuperHyperWheel $NSHW : (V, E)$, is Extreme highlighted and featured. The obtained Extreme SuperHyperSet, by the Algorithm in previous result, of the Extreme SuperHyperVertices of the connected Extreme SuperHyperWheel $ESHW : (V, E)$, in the Extreme SuperHyperModel (9.6), is the Extreme SuperHyperConnectivities.

CHAPTER 10

General Extreme Results

For the SuperHyperConnectivities, Extreme SuperHyperConnectivities, and the Extreme SuperHyperConnectivities, some general results are introduced.

Remark 10.0.1. Let remind that the Extreme SuperHyperConnectivities is "redefined" on the positions of the alphabets.

Corollary 10.0.2. *Assume Extreme SuperHyperConnectivities. Then*

$$\begin{aligned}&Extreme\ SuperHyperConnectivities =\\&\{theSuperHyperConnectivitiesoftheSuperHyperVertices \mid\\&\max|SuperHyperOffensiveSuperHyper\\&Clique|_{ExtremecardinalityamidthoseSuperHyperConnectivities.}\}\end{aligned}$$

plus one Extreme SuperHypeNeighbor to one. Where σ_i is the unary operation on the SuperHyperVertices of the SuperHyperGraph to assign the determinacy, the indeterminacy and the neutrality, for $i = 1, 2, 3,$ respectively.

Corollary 10.0.3. *Assume a Neutrosophic SuperHyperGraph on the same identical letter of the alphabet. Then the notion of Extreme SuperHyperConnectivities and SuperHyperConnectivities coincide.*

Corollary 10.0.4. *Assume a Neutrosophic SuperHyperGraph on the same identical letter of the alphabet. Then a consecutive sequence of the SuperHyperVertices is an Extreme SuperHyperConnectivities if and only if it's a SuperHyperConnectivities.*

Corollary 10.0.5. *Assume a Neutrosophic SuperHyperGraph on the same identical letter of the alphabet. Then a consecutive sequence of the SuperHyperVertices is a strongest SuperHyperConnectivities if and only if it's a longest SuperHyperConnectivities.*

Corollary 10.0.6. *Assume SuperHyperClasses of a Neutrosophic SuperHyperGraph on the same identical letter of the alphabet. Then its Extreme SuperHyperConnectivities is its SuperHyperConnectivities and reversely.*

Corollary 10.0.7. *Assume an Extreme SuperHyperPath(-/SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultipartite, SuperHyperWheel) on the same identical letter of the alphabet. Then its Extreme SuperHyperConnectivities is its SuperHyperConnectivities and reversely.*

Corollary 10.0.8. *Assume a Neutrosophic SuperHyperGraph. Then its Extreme SuperHyperConnectivities isn't well-defined if and only if its SuperHyperConnectivities isn't well-defined.*

Corollary 10.0.9. *Assume SuperHyperClasses of a Neutrosophic SuperHyperGraph. Then its Extreme SuperHyperConnectivities isn't well-defined if and only if its SuperHyperConnectivities isn't well-defined.*

Corollary 10.0.10. *Assume an Extreme SuperHyperPath(-/SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultipartite, SuperHyperWheel). Then its Extreme SuperHyperConnectivities isn't well-defined if and only if its SuperHyperConnectivities isn't well-defined.*

Corollary 10.0.11. *Assume a Neutrosophic SuperHyperGraph. Then its Extreme SuperHyperConnectivities is well-defined if and only if its SuperHyperConnectivities is well-defined.*

Corollary 10.0.12. *Assume SuperHyperClasses of a Neutrosophic SuperHyperGraph. Then its Extreme SuperHyperConnectivities is well-defined if and only if its SuperHyperConnectivities is well-defined.*

Corollary 10.0.13. *Assume an Extreme SuperHyperPath(-/SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultipartite, SuperHyperWheel). Then its Extreme SuperHyperConnectivities is well-defined if and only if its SuperHyperConnectivities is well-defined.*

Proposition 10.0.14. *Let $ESHG : (V, E)$ be a Neutrosophic SuperHyperGraph. Then V is*

(i) : *the dual SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *the strong dual SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *the connected dual SuperHyperDefensive SuperHyperConnectivities;*

(iv) : *the δ-dual SuperHyperDefensive SuperHyperConnectivities;*

(v) : *the strong δ-dual SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *the connected δ-dual SuperHyperDefensive SuperHyperConnectivities.*

Proof. Suppose $ESHG : (V, E)$ is a Neutrosophic SuperHyperGraph. Consider V. All SuperHyperMembers of V have at least one SuperHyperNeighbor inside the SuperHyperSet more than SuperHyperNeighbor out of SuperHyperSet. Thus,
(i). V is the dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv \\
&\forall a \in V,\ |N(a) \cap V| > |N(a) \cap (V \setminus V)| \equiv \\
&\forall a \in V,\ |N(a) \cap V| > |N(a) \cap \emptyset| \equiv \\
&\forall a \in V,\ |N(a) \cap V| > |\emptyset| \equiv \\
&\forall a \in V,\ |N(a) \cap V| > 0 \equiv \\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

(ii). V is the strong dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_s(a) \cap S| > |N_s(a) \cap (V \setminus S)| \equiv\\
&\forall a \in V,\ |N_s(a) \cap V| > |N_s(a) \cap (V \setminus V)| \equiv\\
&\forall a \in V,\ |N_s(a) \cap V| > |N_s(a) \cap \emptyset| \equiv\\
&\forall a \in V,\ |N_s(a) \cap V| > |\emptyset| \equiv\\
&\forall a \in V,\ |N_s(a) \cap V| > 0 \equiv\\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

(iii). V is the connected dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_c(a) \cap S| > |N_c(a) \cap (V \setminus S)| \equiv\\
&\forall a \in V,\ |N_c(a) \cap V| > |N_c(a) \cap (V \setminus V)| \equiv\\
&\forall a \in V,\ |N_c(a) \cap V| > |N_c(a) \cap \emptyset| \equiv\\
&\forall a \in V,\ |N_c(a) \cap V| > |\emptyset| \equiv\\
&\forall a \in V,\ |N_c(a) \cap V| > 0 \equiv\\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

(iv). V is the δ-dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |(N(a) \cap S) - (N(a) \cap (V \setminus S))| > \delta \equiv\\
&\forall a \in V,\ |(N(a) \cap V) - (N(a) \cap (V \setminus V))| > \delta \equiv\\
&\forall a \in V,\ |(N(a) \cap V) - (N(a) \cap (\emptyset))| > \delta \equiv\\
&\forall a \in V,\ |(N(a) \cap V) - (\emptyset)| > \delta \equiv\\
&\forall a \in V,\ |(N(a) \cap V)| > \delta.
\end{aligned}$$

(v). V is the strong δ-dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |(N_s(a) \cap S) - (N_s(a) \cap (V \setminus S))| > \delta \equiv\\
&\forall a \in V,\ |(N_s(a) \cap V) - (N_s(a) \cap (V \setminus V))| > \delta \equiv\\
&\forall a \in V,\ |(N_s(a) \cap V) - (N_s(a) \cap (\emptyset))| > \delta \equiv\\
&\forall a \in V,\ |(N_s(a) \cap V) - (\emptyset)| > \delta \equiv\\
&\forall a \in V,\ |(N_s(a) \cap V)| > \delta.
\end{aligned}$$

(vi). V is connected δ-dual SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |(N_c(a) \cap S) - (N_c(a) \cap (V \setminus S))| > \delta \equiv\\
&\forall a \in V,\ |(N_c(a) \cap V) - (N_c(a) \cap (V \setminus V))| > \delta \equiv\\
&\forall a \in V,\ |(N_c(a) \cap V) - (N_c(a) \cap (\emptyset))| > \delta \equiv\\
&\forall a \in V,\ |(N_c(a) \cap V) - (\emptyset)| > \delta \equiv\\
&\forall a \in V,\ |(N_c(a) \cap V)| > \delta.
\end{aligned}$$

■

Proposition 10.0.15. *Let $NTG : (V, E, \sigma, \mu)$ be a Neutrosophic SuperHyperGraph. Then $\emptyset$ is*

(i) : *the SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *the strong SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *the connected defensive SuperHyperDefensive SuperHyperConnectivities;*

(iv) : *the δ-SuperHyperDefensive SuperHyperConnectivities;*

(v) : *the strong δ-SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *the connected δ-SuperHyperDefensive SuperHyperConnectivities.*

Proof. Suppose $ESHG : (V, E)$ is a Neutrosophic SuperHyperGraph. Consider $\emptyset$. All SuperHyper-Members of $\emptyset$ have no SuperHyperNeighbor inside the SuperHyperSet less than SuperHyperNeighbor out of SuperHyperSet. Thus,
(i). $\emptyset$ is the SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\forall a \in \emptyset,\ |N(a) \cap \emptyset| < |N(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ |\emptyset| < |N(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ 0 < |N(a) \cap V| \equiv \\
&\forall a \in \emptyset,\ 0 < |N(a) \cap V| \equiv \\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

(ii). $\emptyset$ is the strong SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_s(a) \cap S| < |N_s(a) \cap (V \setminus S)| \equiv \\
&\forall a \in \emptyset,\ |N_s(a) \cap \emptyset| < |N_s(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ |\emptyset| < |N_s(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ 0 < |N_s(a) \cap V| \equiv \\
&\forall a \in \emptyset,\ 0 < |N_s(a) \cap V| \equiv \\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

(iii). $\emptyset$ is the connected SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_c(a) \cap S| < |N_c(a) \cap (V \setminus S)| \equiv \\
&\forall a \in \emptyset,\ |N_c(a) \cap \emptyset| < |N_c(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ |\emptyset| < |N_c(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ 0 < |N_c(a) \cap V| \equiv \\
&\forall a \in \emptyset,\ 0 < |N_c(a) \cap V| \equiv
\end{aligned}$$

$$\forall a \in V,\ \delta > 0.$$

(iv). $\emptyset$ is the δ-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |(N(a) \cap S) - (N(a) \cap (V \setminus S))| < \delta \equiv \\
&\forall a \in \emptyset,\ |(N(a) \cap \emptyset) - (N(a) \cap (V \setminus \emptyset))| < \delta \equiv \\
&\forall a \in \emptyset,\ |(N(a) \cap \emptyset) - (N(a) \cap (V))| < \delta \equiv \\
&\forall a \in \emptyset,\ |\emptyset| < \delta \equiv \\
&\forall a \in V,\ 0 < \delta.
\end{aligned}$$

(v). $\emptyset$ is the strong δ-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |(N_s(a) \cap S) - (N_s(a) \cap (V \setminus S))| < \delta \equiv \\
&\forall a \in \emptyset,\ |(N_s(a) \cap \emptyset) - (N_s(a) \cap (V \setminus \emptyset))| < \delta \equiv \\
&\forall a \in \emptyset,\ |(N_s(a) \cap \emptyset) - (N_s(a) \cap (V))| < \delta \equiv \\
&\forall a \in \emptyset,\ |\emptyset| < \delta \equiv \\
&\forall a \in V,\ 0 < \delta.
\end{aligned}$$

(vi). $\emptyset$ is the connected δ-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |(N_c(a) \cap S) - (N_c(a) \cap (V \setminus S))| < \delta \equiv \\
&\forall a \in \emptyset,\ |(N_c(a) \cap \emptyset) - (N_c(a) \cap (V \setminus \emptyset))| < \delta \equiv \\
&\forall a \in \emptyset,\ |(N_c(a) \cap \emptyset) - (N_c(a) \cap (V))| < \delta \equiv \\
&\forall a \in \emptyset,\ |\emptyset| < \delta \equiv \\
&\forall a \in V,\ 0 < \delta.
\end{aligned}$$

■

Proposition 10.0.16. *Let $ESHG : (V, E)$ be a Neutrosophic SuperHyperGraph. Then an independent SuperHyperSet is*

(i) : *the SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *the strong SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *the connected SuperHyperDefensive SuperHyperConnectivities;*

(iv) : *the δ-SuperHyperDefensive SuperHyperConnectivities;*

(v) : *the strong δ-SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *the connected δ-SuperHyperDefensive SuperHyperConnectivities.*

Proof. Suppose $ESHG:(V,E)$ is a Neutrosophic SuperHyperGraph. Consider S. All SuperHyperMembers of S have no SuperHyperNeighbor inside the SuperHyperSet less than SuperHyperNeighbor out of SuperHyperSet. Thus,
(i). An independent SuperHyperSet is the SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N(a)\cap S| < |N(a)\cap (V\setminus S)| \equiv\\
&\forall a \in S,\ |N(a)\cap S| < |N(a)\cap (V\setminus S)| \equiv\\
&\forall a \in S,\ |\emptyset| < |N(a)\cap (V\setminus S)| \equiv\\
&\forall a \in S,\ 0 < |N(a)\cap V| \equiv\\
&\forall a \in S,\ 0 < |N(a)| \equiv\\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

(ii). An independent SuperHyperSet is the strong SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_s(a)\cap S| < |N_s(a)\cap (V\setminus S)| \equiv\\
&\forall a \in S,\ |N_s(a)\cap S| < |N_s(a)\cap (V\setminus S)| \equiv\\
&\forall a \in S,\ |\emptyset| < |N_s(a)\cap (V\setminus S)| \equiv\\
&\forall a \in S,\ 0 < |N_s(a)\cap V| \equiv\\
&\forall a \in S,\ 0 < |N_s(a)| \equiv\\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

(iii). An independent SuperHyperSet is the connected SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_c(a)\cap S| < |N_c(a)\cap (V\setminus S)| \equiv\\
&\forall a \in S,\ |N_c(a)\cap S| < |N_c(a)\cap (V\setminus S)| \equiv\\
&\forall a \in S,\ |\emptyset| < |N_c(a)\cap (V\setminus S)| \equiv\\
&\forall a \in S,\ 0 < |N_c(a)\cap V| \equiv\\
&\forall a \in S,\ 0 < |N_c(a)| \equiv\\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

(iv). An independent SuperHyperSet is the δ-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |(N(a)\cap S) - (N(a)\cap (V\setminus S))| < \delta \equiv\\
&\forall a \in S,\ |(N(a)\cap S) - (N(a)\cap (V\setminus S))| < \delta \equiv\\
&\forall a \in S,\ |(N(a)\cap S) - (N(a)\cap (V))| < \delta \equiv\\
&\forall a \in S,\ |\emptyset| < \delta \equiv\\
&\forall a \in V,\ 0 < \delta.
\end{aligned}$$

(v). An independent SuperHyperSet is the strong δ-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\forall a \in S,\ |(N_s(a)\cap S) - (N_s(a)\cap (V\setminus S))| < \delta \equiv$$

$$\forall a \in S,\ |(N_s(a) \cap S) - (N_s(a) \cap (V \setminus S))| < \delta \equiv$$
$$\forall a \in S,\ |(N_s(a) \cap S) - (N_s(a) \cap (V))| < \delta \equiv$$
$$\forall a \in S,\ |\emptyset| < \delta \equiv$$
$$\forall a \in V,\ 0 < \delta.$$

(vi). An independent SuperHyperSet is the connected δ-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\forall a \in S,\ |(N_c(a) \cap S) - (N_c(a) \cap (V \setminus S))| < \delta \equiv$$
$$\forall a \in S,\ |(N_c(a) \cap S) - (N_c(a) \cap (V \setminus S))| < \delta \equiv$$
$$\forall a \in S,\ |(N_c(a) \cap S) - (N_c(a) \cap (V))| < \delta \equiv$$
$$\forall a \in S,\ |\emptyset| < \delta \equiv$$
$$\forall a \in V,\ 0 < \delta.$$

■

Proposition 10.0.17. *Let $ESHG : (V, E)$ be an Extreme SuperHyperUniform SuperHyperGraph which is a SuperHyperConnectivities/SuperHyperPath. Then V is a maximal*

(i) : *SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected SuperHyperDefensive SuperHyperConnectivities;*

(iv) : *$\mathcal{O}(ESHG)$-SuperHyperDefensive SuperHyperConnectivities;*

(v) : *strong $\mathcal{O}(ESHG)$-SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected $\mathcal{O}(ESHG)$-SuperHyperDefensive SuperHyperConnectivities;*

Where the exterior SuperHyperVertices and the interior SuperHyperVertices coincide.

Proof. Suppose $ESHG : (V, E)$ is a Neutrosophic SuperHyperGraph which is a SuperHyperUniform SuperHyperConnectivities/SuperHyperPath.
(i). Consider one segment is out of S which is SuperHyperDefensive SuperHyperConnectivities. This segment has $2t$ SuperHyperNeighbors in S, i.e, Suppose $x_{i_{i=1,2,\ldots,t}} \in V \setminus S$ such that $y_{i_{i=1,2,\ldots,t}}, z_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})$. By it's the exterior SuperHyperVertices and the interior SuperHyperVertices coincide and it's SuperHyperUniform SuperHyperConnectivities, $|N(x_{i_{i=1,2,\ldots,t}})| =$

$|N(y_{i_{i=1,2,\ldots,t}})| = |N(z_{i_{i=1,2,\ldots,t}})| = 2t$. Thus

$$\begin{aligned}
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |N(y_{i_{i=1,2,\ldots,t}}) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}) \cap (V \setminus (V \setminus \{x_{i_{i=1,2,\ldots,t}}\}))| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |N(y_{i_{i=1,2,\ldots,t}}) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}) \cap \{x_{i_{i=1,2,\ldots,t}}\})| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |\{z_1, z_2, \ldots, z_{t-1}\}| < \\
&|\{x_1, x_2, \ldots, x_{t-1}\})| \equiv \\
&\exists y \in S,\ t-1 < t-1.
\end{aligned}$$

Thus it's contradiction. It implies every $V \setminus \{x_{i_{i=1,2,\ldots,t}}\}$ isn't SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperUniform SuperHyperConnectivities.
Consider one segment, with two segments related to the SuperHyperLeaves as exceptions, is out of S which is SuperHyperDefensive SuperHyperConnectivities. This segment has $2t$ SuperHyperNeighbors in S, i.e, Suppose $x_{i_{i=1,2,\ldots,t}} \in V \setminus S$ such that $y_{i_{i=1,2,\ldots,t}}, z_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})$. By it's the exterior SuperHyperVertices and the interior SuperHyperVertices coincide and it's SuperHyperUniform SuperHyperPath, $|N(x_{i_{i=1,2,\ldots,t}})| = |N(y_{i_{i=1,2,\ldots,t}})| = |N(z_{i_{i=1,2,\ldots,t}})| = 2t$. Thus

$$\begin{aligned}
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |N(y_{i_{i=1,2,\ldots,t}}) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}) \cap (V \setminus (V \setminus \{x_{i_{i=1,2,\ldots,t}}\}))| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |N(y_{i_{i=1,2,\ldots,t}}) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}) \cap \{x_{i_{i=1,2,\ldots,t}}\})| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |\{z_1, z_2, \ldots, z_{t-1}\}| < \\
&|\{x_1, x_2, \ldots, x_{t-1}\})| \equiv \\
&\exists y \in S,\ t-1 < t-1.
\end{aligned}$$

Thus it's contradiction. It implies every $V \setminus \{x_{i_{i=1,2,\ldots,t}}\}$ isn't SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperUniform SuperHyperPath.
(ii), (iii) are obvious by (i).
(iv). By (i), $|V|$ is maximal and it's a SuperHyperDefensive SuperHyperConnectivities. Thus it's $|V|$-SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv). ∎

Proposition 10.0.18. *Let $ESHG : (V, E)$ be a Neutrosophic SuperHyperGraph which is a SuperHyperUniform SuperHyperWheel. Then V is a maximal*

(i) : *dual SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong dual SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected dual SuperHyperDefensive SuperHyperConnectivities;*

(iv) : *$\mathcal{O}(ESHG)$-dual SuperHyperDefensive SuperHyperConnectivities;*

(v) : *strong $\mathcal{O}(ESHG)$-dual SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected $\mathcal{O}(ESHG)$-dual SuperHyperDefensive SuperHyperConnectivities;*

Where the exterior SuperHyperVertices and the interior SuperHyperVertices coincide.

Proof. Suppose $ESHG : (V, E)$ is an Extreme SuperHyperUniform SuperHyperGraph which is a SuperHyperWheel.
(i). Consider one segment is out of S which is SuperHyperDefensive SuperHyperConnectivities. This segment has $3t$ SuperHyperNeighbors in S, i.e, Suppose $x_{i_{i=1,2,\ldots,t}} \in V \setminus S$ such that $y_{i_{i=1,2,\ldots,t}}, z_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})$. By it's the exterior SuperHyperVertices and the interior SuperHyperVertices coincide and it's SuperHyperUniform SuperHyperWheel, $|N(x_{i_{i=1,2,\ldots,t}})| = |N(y_{i_{i=1,2,\ldots,t}})| = |N(z_{i_{i=1,2,\ldots,t}})| = 3t$. Thus

$$\begin{aligned}
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}}) \in V \setminus \{x_i\}_{i=1}^{t}, \\
&\ |N(y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})) \cap (V \setminus (V \setminus \{x_{i_{i=1,2,\ldots,t}}\}))| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}}) \in V \setminus \{x_i\}_{i=1}^{t}, \\
&\ |N(y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})) \cap \{x_{i_{i=1,2,\ldots,t}}\})| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}}) \in V \setminus \{x_i\}_{i=1}^{t}, \\
&\ |\{z_1, z_2, \ldots, z_{t-1}, z'_1, z'_2, \ldots, z'_t\}| < |\{x_1, x_2, \ldots, x_{t-1}\})| \equiv \\
&\exists y \in S,\ 2t - 1 < t - 1.
\end{aligned}$$

Thus it's contradiction. It implies every $V \setminus \{x_{i_{i=1,2,\ldots,t}}\}$ is SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperUniform SuperHyperWheel.
(ii), (iii) are obvious by (i).
(iv). By (i), $|V|$ is maximal and it is a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's a dual $|V|$-SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv). ■

Proposition 10.0.19. *Let $ESHG : (V, E)$ be an Extreme SuperHyperUniform SuperHyperGraph which is a SuperHyperConnectivities/SuperHyperPath. Then the number of*

(i) : *the SuperHyperConnectivities;*

(ii) : *the SuperHyperConnectivities;*

(iii) : *the connected SuperHyperConnectivities;*

(iv) : *the $\mathcal{O}(ESHG)$-SuperHyperConnectivities;*

(v) : *the strong $\mathcal{O}(ESHG)$-SuperHyperConnectivities;*

(vi) : *the connected $\mathcal{O}(ESHG)$-SuperHyperConnectivities.*

is one and it's only V. Where the exterior SuperHyperVertices and the interior SuperHyperVertices coincide.

Proof. Suppose $ESHG : (V, E)$ is a Neutrosophic SuperHyperGraph which is a SuperHyperUniform SuperHyperConnectivities/SuperHyperPath.
(i). Consider one segment is out of S which is SuperHyperDefensive SuperHyperConnectivities. This segment has $2t$ SuperHyperNeighbors in S, i.e, Suppose $x_{i_{i=1,2,\ldots,t}} \in V \setminus S$ such that $y_{i_{i=1,2,\ldots,t}}, z_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})$. By it's the exterior SuperHyperVertices and the interior SuperHyperVertices coincide and it's SuperHyperUniform SuperHyperConnectivities, $|N(x_{i_{i=1,2,\ldots,t}})| = |N(y_{i_{i=1,2,\ldots,t}})| = |N(z_{i_{i=1,2,\ldots,t}})| = 2t$. Thus

$$\begin{aligned}
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |N(y_{i_{i=1,2,\ldots,t}}) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}) \cap (V \setminus (V \setminus \{x_{i_{i=1,2,\ldots,t}}\}))| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |N(y_{i_{i=1,2,\ldots,t}}) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}) \cap \{x_{i_{i=1,2,\ldots,t}}\})| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |\{z_1, z_2, \ldots, z_{t-1}\}| < |\{x_1, x_2, \ldots, x_{t-1}\})| \equiv \\
&\exists y \in S,\ t - 1 < t - 1.
\end{aligned}$$

Thus it's contradiction. It implies every $V \setminus \{x_{i_{i=1,2,\ldots,t}}\}$ isn't SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperUniform SuperHyperConnectivities.
Consider one segment, with two segments related to the SuperHyperLeaves as exceptions, is out of S which is SuperHyperDefensive SuperHyperConnectivities. This segment has $2t$ SuperHyperNeighbors in S, i.e, Suppose $x_{i_{i=1,2,\ldots,t}} \in V \setminus S$ such that $y_{i_{i=1,2,\ldots,t}}, z_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})$. By it's the exterior SuperHyperVertices and the interior SuperHyperVertices coincide and it's SuperHyperUniform SuperHyperPath, $|N(x_{i_{i=1,2,\ldots,t}})| = |N(y_{i_{i=1,2,\ldots,t}})| = |N(z_{i_{i=1,2,\ldots,t}})| = 2t$. Thus

$$\begin{aligned}
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |N(y_{i_{i=1,2,\ldots,t}}) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}) \cap (V \setminus (V \setminus \{x_{i_{i=1,2,\ldots,t}}\}))| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |N(y_{i_{i=1,2,\ldots,t}}) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}) \cap \{x_{i_{i=1,2,\ldots,t}}\})| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}} \in V \setminus \{x_i\}_{i=1}^{t},\ |\{z_1, z_2, \ldots, z_{t-1}\}| < \\
&|\{x_1, x_2, \ldots, x_{t-1}\})| \equiv \\
&\exists y \in S,\ t - 1 < t - 1.
\end{aligned}$$

Thus it's contradiction. It implies every $V \setminus \{x_{i_{i=1,2,\ldots,t}}\}$ isn't SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperUniform SuperHyperPath.
(ii), (iii) are obvious by (i).
(iv). By (i), $|V|$ is maximal and it's a SuperHyperDefensive SuperHyperConnectivities. Thus it's

$|V|$-SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv). ■

Proposition 10.0.20. *Let $ESHG : (V, E)$ be an Extreme SuperHyperUniform SuperHyperGraph which is a SuperHyperWheel. Then the number of*

(i) : *the dual SuperHyperConnectivities;*

(ii) : *the dual SuperHyperConnectivities;*

(iii) : *the dual connected SuperHyperConnectivities;*

(iv) : *the dual $\mathcal{O}(ESHG)$-SuperHyperConnectivities;*

(v) : *the strong dual $\mathcal{O}(ESHG)$-SuperHyperConnectivities;*

(vi) : *the connected dual $\mathcal{O}(ESHG)$-SuperHyperConnectivities.*

is one and it's only V. Where the exterior SuperHyperVertices and the interior SuperHyperVertices coincide.

Proof. Suppose $ESHG : (V, E)$ is an Extreme SuperHyperUniform SuperHyperGraph which is a SuperHyperWheel.
(i). Consider one segment is out of S which is SuperHyperDefensive SuperHyperConnectivities. This segment has $3t$ SuperHyperNeighbors in S, i.e, Suppose $x_{i_{i=1,2,\ldots,t}} \in V \setminus S$ such that $y_{i_{i=1,2,\ldots,t}}, z_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})$. By it's the exterior SuperHyperVertices and the interior SuperHyperVertices coincide and it's SuperHyperUniform SuperHyperWheel, $|N(x_{i_{i=1,2,\ldots,t}})| = |N(y_{i_{i=1,2,\ldots,t}})| = |N(z_{i_{i=1,2,\ldots,t}})| = 3t$. Thus

$$
\begin{aligned}
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}}) \in V \setminus \{x_i\}_{i=1}^{t}, \\
&\ |N(y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})) \cap (V \setminus (V \setminus \{x_{i_{i=1,2,\ldots,t}}\}))| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}}) \in V \setminus \{x_i\}_{i=1}^{t} \\
&,\ |N(y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})) \cap S| < \\
&|N(y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}})) \cap \{x_{i_{i=1,2,\ldots,t}}\})| \equiv \\
&\exists y_{i_{i=1,2,\ldots,t}}, s_{i_{i=1,2,\ldots,t}} \in N(x_{i_{i=1,2,\ldots,t}}) \in V \setminus \{x_i\}_{i=1}^{t}, \\
&\ |\{z_1, z_2, \ldots, z_{t-1}, z'_1, z'_2, \ldots, z'_t\}| < |\{x_1, x_2, \ldots, x_{t-1}\})| \equiv \\
&\exists y \in S,\ 2t - 1 < t - 1.
\end{aligned}
$$

Thus it's contradiction. It implies every $V \setminus \{x_{i_{i=1,2,\ldots,t}}\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperUniform SuperHyperWheel.
(ii), (iii) are obvious by (i).
(iv). By (i), $|V|$ is maximal and it's a dual SuperHyperDefensive SuperHyperConnectivities. Thus it isn't an $|V|$-SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv). ■

Proposition 10.0.21. *Let $ESHG : (V, E)$ be an Extreme SuperHyperUniform SuperHyperGraph which is a SuperHyperStar/SuperHyperComplete SuperHyperBipartite/SuperHyperComplete SuperHyperMultipartite. Then a SuperHyperSet contains [the SuperHyperCenter and] the half of multiplying r with the number of all the SuperHyperEdges plus one of all the SuperHyperVertices is a*

(i) : *dual SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong dual SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected dual SuperHyperDefensive SuperHyperConnectivities;*

(iv) : $\frac{\mathcal{O}(ESHG)}{2} + 1$*-dual SuperHyperDefensive SuperHyperConnectivities;*

(v) : *strong* $\frac{\mathcal{O}(ESHG)}{2} + 1$*-dual SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected* $\frac{\mathcal{O}(ESHG)}{2} + 1$*-dual SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Consider n half $+1$ SuperHyperVertices are in S which is SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has either $\frac{n}{2}$ or one SuperHyperNeighbors in S. If the SuperHyperVertex is non-SuperHyperCenter, then

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ 1 > 0.$$

If the SuperHyperVertex is SuperHyperCenter, then

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperStar.
Consider n half $+1$ SuperHyperVertices are in S which is SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has at most $\frac{n}{2}$ SuperHyperNeighbors in S.

$$\forall a \in S,\ \frac{n}{2} > |N(a) \cap S| > \frac{n}{2} - 1 > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperBipartite which isn't a SuperHyperStar.
Consider n half $+1$ SuperHyperVertices are in S which is SuperHyperDefensive SuperHyperConnectivities and they're chosen from different SuperHyperParts, equally or almost equally as possible. A SuperHyperVertex has at most $\frac{n}{2}$ SuperHyperNeighbors in S.

$$\forall a \in S,\ \frac{n}{2} > |N(a) \cap S| > \frac{n}{2} - 1 > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperMultipartite which is neither a SuperHyperStar nor SuperHyperComplete SuperHyperBipartite.
(ii), (iii) are obvious by (i).
(iv). By (i), $\{x_i\}_{i=1}^{\frac{\mathcal{O}(ESHG)}{2}+1}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's $\frac{\mathcal{O}(ESHG)}{2}+1$-dual SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv). ■

Proposition 10.0.22. *Let $ESHG : (V, E)$ be an Extreme SuperHyperUniform SuperHyperGraph which is a SuperHyperStar/SuperHyperComplete SuperHyperBipartite/SuperHyperComplete SuperHyperMultipartite. Then a SuperHyperSet contains the half of multiplying r with the number of all the SuperHyperEdges plus one of all the SuperHyperVertices in the biggest SuperHyperPart is a*

(i) : *SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected SuperHyperDefensive SuperHyperConnectivities;*

(iv) : *δ-SuperHyperDefensive SuperHyperConnectivities;*

(v) : *strong δ-SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected δ-SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Consider the half of multiplying r with the number of all the SuperHyperEdges plus one of all the SuperHyperVertices in the biggest SuperHyperPart are in S which is SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has either $n-1, 1$ or zero SuperHyperNeighbors in S. If the SuperHyperVertex is in S, then

$$\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ 0 < 1.$$

Thus it's proved. It implies every S is a SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperStar.
Consider the half of multiplying r with the number of all the SuperHyperEdges plus one of all the SuperHyperVertices in the biggest SuperHyperPart are in S which is SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has no SuperHyperNeighbor in S.

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ 0 < \delta.$$

Thus it's proved. It implies every S is a SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperBipartite which isn't a SuperHyperStar.
Consider the half of multiplying r with the number of all the SuperHyperEdges plus one of all the SuperHyperVertices in the biggest SuperHyperPart are in S which is SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has no SuperHyperNeighbor in S.

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ 0 < \delta.$$

Thus it's proved. It implies every S is a SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperMultipartite which is neither a SuperHyperStar nor SuperHyperComplete SuperHyperBipartite.
(ii), (iii) are obvious by (i).
(iv). By (i), S is a SuperHyperDefensive SuperHyperConnectivities. Thus it's an δ-SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv). ■

Proposition 10.0.23. *Let $ESHG : (V, E)$ be an Extreme SuperHyperUniform SuperHyperGraph which is a SuperHyperStar/SuperHyperComplete SuperHyperBipartite/SuperHyperComplete SuperHyperMultipartite. Then Then the number of*

(i) : *dual SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong dual SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected dual SuperHyperDefensive SuperHyperConnectivities;*

(iv) : $\frac{\mathcal{O}(ESHG)}{2} + 1$*-dual SuperHyperDefensive SuperHyperConnectivities;*

(v) : *strong* $\frac{\mathcal{O}(ESHG)}{2} + 1$*-dual SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected* $\frac{\mathcal{O}(ESHG)}{2} + 1$*-dual SuperHyperDefensive SuperHyperConnectivities.*

is one and it's only S, a SuperHyperSet contains [the SuperHyperCenter and] the half of multiplying r with the number of all the SuperHyperEdges plus one of all the SuperHyperVertices. Where the exterior SuperHyperVertices and the interior SuperHyperVertices coincide.

Proof. (i). Consider n half $+1$ SuperHyperVertices are in S which is SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has either $\frac{n}{2}$ or one SuperHyperNeighbors in S. If the SuperHyperVertex is non-SuperHyperCenter, then

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ 1 > 0.$$

If the SuperHyperVertex is SuperHyperCenter, then

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperStar.
Consider n half $+1$ SuperHyperVertices are in S which is SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has at most $\frac{n}{2}$ SuperHyperNeighbors in S.

$$\forall a \in S,\ \frac{n}{2} > |N(a) \cap S| > \frac{n}{2} - 1 > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperBipartite which isn't a SuperHyperStar.
Consider n half $+1$ SuperHyperVertices are in S which is SuperHyperDefensive SuperHyperConnectivities and they're chosen from different SuperHyperParts, equally or almost equally as possible. A SuperHyperVertex has at most $\frac{n}{2}$ SuperHyperNeighbors in S.

$$\forall a \in S,\ \frac{n}{2} > |N(a) \cap S| > \frac{n}{2} - 1 > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperMultipartite which is neither a SuperHyperStar nor SuperHyperComplete SuperHyperBipartite.
(ii), (iii) are obvious by (i).
(iv). By (i), $\{x_i\}_{i=1}^{\frac{\mathcal{O}(ESHG)}{2}+1}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's $\frac{\mathcal{O}(ESHG)}{2} + 1$-dual SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv). ■

Proposition 10.0.24. *Let $ESHG : (V, E)$ be a Neutrosophic SuperHyperGraph. The number of connected component is $|V - S|$ if there's a SuperHyperSet which is a dual*

(i) : *SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected SuperHyperDefensive SuperHyperConnectivities;*

(iv) : *SuperHyperConnectivities;*

(v) : *strong 1-SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected 1-SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Consider some SuperHyperVertices are out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. These SuperHyperVertex-type have some SuperHyperNeighbors in S but no SuperHyperNeighbor out of S. Thus

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ 1 > 0.$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities and number of connected component is $|V - S|$.
(ii), (iii) are obvious by (i).
(iv). By (i), S is a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's a dual 1-SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv). ■

Proposition 10.0.25. *Let $ESHG : (V, E)$ be a Neutrosophic SuperHyperGraph. Then the number is at most $\mathcal{O}(ESHG)$ and the Extreme number is at most $\mathcal{O}_n(ESHG)$.*

Proof. Suppose $ESHG : (V, E)$ is a Neutrosophic SuperHyperGraph. Consider V. All SuperHyperMembers of V have at least one SuperHyperNeighbor inside the SuperHyperSet more than SuperHyperNeighbor out of SuperHyperSet. Thus,
V is a dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv \\
&\forall a \in V,\ |N(a) \cap V| > |N(a) \cap (V \setminus V)| \equiv \\
&\forall a \in V,\ |N(a) \cap V| > |N(a) \cap \emptyset| \equiv \\
&\forall a \in V,\ |N(a) \cap V| > |\emptyset| \equiv \\
&\forall a \in V,\ |N(a) \cap V| > 0 \equiv \\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

V is a dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_s(a) \cap S| > |N_s(a) \cap (V \setminus S)| \equiv \\
&\forall a \in V,\ |N_s(a) \cap V| > |N_s(a) \cap (V \setminus V)| \equiv \\
&\forall a \in V,\ |N_s(a) \cap V| > |N_s(a) \cap \emptyset| \equiv \\
&\forall a \in V,\ |N_s(a) \cap V| > |\emptyset| \equiv \\
&\forall a \in V,\ |N_s(a) \cap V| > 0 \equiv \\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

V is connected a dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_c(a) \cap S| > |N_c(a) \cap (V \setminus S)| \equiv \\
&\forall a \in V,\ |N_c(a) \cap V| > |N_c(a) \cap (V \setminus V)| \equiv \\
&\forall a \in V,\ |N_c(a) \cap V| > |N_c(a) \cap \emptyset| \equiv \\
&\forall a \in V,\ |N_c(a) \cap V| > |\emptyset| \equiv \\
&\forall a \in V,\ |N_c(a) \cap V| > 0 \equiv \\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

V is a dual δ-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |(N(a) \cap S) - (N(a) \cap (V \setminus S))| > \delta \equiv \\
&\forall a \in V,\ |(N(a) \cap V) - (N(a) \cap (V \setminus V))| > \delta \equiv \\
&\forall a \in V,\ |(N(a) \cap V) - (N(a) \cap (\emptyset))| > \delta \equiv \\
&\forall a \in V,\ |(N(a) \cap V) - (\emptyset)| > \delta \equiv \\
&\forall a \in V,\ |(N(a) \cap V)| > \delta.
\end{aligned}$$

V is a dual strong δ-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\forall a \in S,\ |(N_s(a) \cap S) - (N_s(a) \cap (V \setminus S))| > \delta \equiv$$

$$\forall a \in V,\ |(N_s(a) \cap V) - (N_s(a) \cap (V \setminus V))| > \delta \equiv$$
$$\forall a \in V,\ |(N_s(a) \cap V) - (N_s(a) \cap (\emptyset))| > \delta \equiv$$
$$\forall a \in V,\ |(N_s(a) \cap V) - (\emptyset)| > \delta \equiv$$
$$\forall a \in V,\ |(N_s(a) \cap V)| > \delta.$$

V is a dual connected δ-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\forall a \in S,\ |(N_c(a) \cap S) - (N_c(a) \cap (V \setminus S))| > \delta \equiv$$
$$\forall a \in V,\ |(N_c(a) \cap V) - (N_c(a) \cap (V \setminus V))| > \delta \equiv$$
$$\forall a \in V,\ |(N_c(a) \cap V) - (N_c(a) \cap (\emptyset))| > \delta \equiv$$
$$\forall a \in V,\ |(N_c(a) \cap V) - (\emptyset)| > \delta \equiv$$
$$\forall a \in V,\ |(N_c(a) \cap V)| > \delta.$$

Thus V is a dual SuperHyperDefensive SuperHyperConnectivities and V is the biggest SuperHyperSet in $ESHG : (V, E)$. Then the number is
at most $\mathcal{O}(ESHG : (V, E))$ and the Extreme number is
at most $\mathcal{O}_n(ESHG : (V, E))$. ∎

Proposition 10.0.26. *Let $ESHG : (V, E)$ be a Neutrosophic SuperHyperGraph which is SuperHyperComplete. The number is*
$\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1$ *and the Extreme number is*
$\min \Sigma_{v \in \{v_1, v_2, \cdots, v_t\}_{t > \frac{\mathcal{O}(ESHG:(V,E))}{2}} \subseteq V} \sigma(v)$, *in the setting of dual*

(i) : *SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected SuperHyperDefensive SuperHyperConnectivities;*

(iv) : $(\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1)$*-SuperHyperDefensive SuperHyperConnectivities;*

(v) : *strong* $(\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1)$*-SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected* $(\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1)$*-SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Consider n half -1 SuperHyperVertices are out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has n half SuperHyperNeighbors in S.

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperGraph. Thus the number is
$\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1$ and the Extreme number is
$\min \Sigma_{v \in \{v_1, v_2, \cdots, v_t\}_{t > \frac{\mathcal{O}(ESHG:(V,E))}{2}} \subseteq V} \sigma(v)$, in the setting of a dual SuperHyperDefensive SuperHyperConnectivities.

(ii). Consider n half -1 SuperHyperVertices are out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has n half SuperHyperNeighbors in S.

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual strong SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperGraph. Thus the number is $\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1$ and the Extreme number is $\min \Sigma_{v \in \{v_1,v_2,\cdots,v_t\}_{t > \frac{\mathcal{O}(ESHG:(V,E))}{2}} \subseteq V} \sigma(v)$, in the setting of a dual strong SuperHyperDefensive SuperHyperConnectivities.

(iii). Consider n half -1 SuperHyperVertices are out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has n half SuperHyperNeighbors in S.

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual connected SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperGraph. Thus the number is $\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1$ and the Extreme number is $\min \Sigma_{v \in \{v_1,v_2,\cdots,v_t\}_{t > \frac{\mathcal{O}(ESHG:(V,E))}{2}} \subseteq V} \sigma(v)$, in the setting of a dual connected SuperHyperDefensive SuperHyperConnectivities.

(iv). Consider n half -1 SuperHyperVertices are out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has n half SuperHyperNeighbors in S.

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual $(\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1)$-SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperGraph. Thus the number is $\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1$ and the Extreme number is $\min \Sigma_{v \in \{v_1,v_2,\cdots,v_t\}_{t > \frac{\mathcal{O}(ESHG:(V,E))}{2}} \subseteq V} \sigma(v)$, in the setting of a dual $(\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1)$-SuperHyperDefensive SuperHyperConnectivities.

(v). Consider n half -1 SuperHyperVertices are out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has n half SuperHyperNeighbors in S.

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual strong $(\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1)$-SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperGraph. Thus the number is $\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1$ and the Extreme number is $\min \Sigma_{v \in \{v_1,v_2,\cdots,v_t\}_{t > \frac{\mathcal{O}(ESHG:(V,E))}{2}} \subseteq V} \sigma(v)$, in the setting of a dual strong $(\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1)$-SuperHyperDefensive SuperHyperConnectivities.

(vi). Consider n half -1 SuperHyperVertices are out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has n half SuperHyperNeighbors in S.

$$\forall a \in S,\ |N(a) \cap S| > |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ \frac{n}{2} > \frac{n}{2} - 1.$$

Thus it's proved. It implies every S is a dual connected $(\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1)$-SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperComplete SuperHyperGraph. Thus the number is $\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1$ and the Extreme number is
$\min \Sigma_{v \in \{v_1,v_2,\cdots,v_t\}_{t > \frac{\mathcal{O}(ESHG:(V,E))}{2}} \subseteq V} \sigma(v)$, in the setting of a dual connected $(\frac{\mathcal{O}(ESHG:(V,E))}{2} + 1)$-SuperHyperDefensive SuperHyperConnectivities. ■

Proposition 10.0.27. *Let $ESHG : (V, E)$ be a Neutrosophic SuperHyperGraph which is $\emptyset$. The number is*
0 and the Extreme number is
0, for an independent SuperHyperSet in the setting of dual

(i) : *SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected SuperHyperDefensive SuperHyperConnectivities;*

(iv) : *0-SuperHyperDefensive SuperHyperConnectivities;*

(v) : *strong 0-SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected 0-SuperHyperDefensive SuperHyperConnectivities.*

Proof. Suppose $ESHG : (V, E)$ is a Neutrosophic SuperHyperGraph. Consider $\emptyset$. All SuperHyperMembers of $\emptyset$ have no SuperHyperNeighbor inside the SuperHyperSet less than SuperHyperNeighbor out of SuperHyperSet. Thus,
(i). $\emptyset$ is a dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in \emptyset,\ |N(a) \cap \emptyset| < |N(a) \cap (V \setminus \emptyset)| \equiv$$
$$\forall a \in \emptyset,\ |\emptyset| < |N(a) \cap (V \setminus \emptyset)| \equiv$$
$$\forall a \in \emptyset,\ 0 < |N(a) \cap V| \equiv$$
$$\forall a \in \emptyset,\ 0 < |N(a) \cap V| \equiv$$
$$\forall a \in V,\ \delta > 0.$$

The number is
0 and the Extreme number is
0, for an independent SuperHyperSet in the setting of a dual SuperHyperDefensive SuperHyperConnectivities.

(ii). $\emptyset$ is a dual strong SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_s(a) \cap S| < |N_s(a) \cap (V \setminus S)| \equiv \\
&\forall a \in \emptyset,\ |N_s(a) \cap \emptyset| < |N_s(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ |\emptyset| < |N_s(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ 0 < |N_s(a) \cap V| \equiv \\
&\forall a \in \emptyset,\ 0 < |N_s(a) \cap V| \equiv \\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

The number is
0 and the Extreme number is
0, for an independent SuperHyperSet in the setting of a dual strong SuperHyperDefensive SuperHyperConnectivities.
(iii). $\emptyset$ is a dual connected SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |N_c(a) \cap S| < |N_c(a) \cap (V \setminus S)| \equiv \\
&\forall a \in \emptyset,\ |N_c(a) \cap \emptyset| < |N_c(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ |\emptyset| < |N_c(a) \cap (V \setminus \emptyset)| \equiv \\
&\forall a \in \emptyset,\ 0 < |N_c(a) \cap V| \equiv \\
&\forall a \in \emptyset,\ 0 < |N_c(a) \cap V| \equiv \\
&\forall a \in V,\ \delta > 0.
\end{aligned}$$

The number is
0 and the Extreme number is
0, for an independent SuperHyperSet in the setting of a dual connected SuperHyperDefensive SuperHyperConnectivities.
(iv). $\emptyset$ is a dual SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\begin{aligned}
&\forall a \in S,\ |(N(a) \cap S) - (N(a) \cap (V \setminus S))| < \delta \equiv \\
&\forall a \in \emptyset,\ |(N(a) \cap \emptyset) - (N(a) \cap (V \setminus \emptyset))| < \delta \equiv \\
&\forall a \in \emptyset,\ |(N(a) \cap \emptyset) - (N(a) \cap (V))| < \delta \equiv \\
&\forall a \in \emptyset,\ |\emptyset| < \delta \equiv \\
&\forall a \in V,\ 0 < \delta.
\end{aligned}$$

The number is
0 and the Extreme number is
0, for an independent SuperHyperSet in the setting of a dual 0-SuperHyperDefensive SuperHyper-Connectivities.
(v). $\emptyset$ is a dual strong 0-SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\forall a \in S,\ |(N_s(a) \cap S) - (N_s(a) \cap (V \setminus S))| < \delta \equiv$$

$$\forall a \in \emptyset,\ |(N_s(a) \cap \emptyset) - (N_s(a) \cap (V \setminus \emptyset))| < \delta \equiv$$
$$\forall a \in \emptyset,\ |(N_s(a) \cap \emptyset) - (N_s(a) \cap (V))| < \delta \equiv$$
$$\forall a \in \emptyset,\ |\emptyset| < \delta \equiv$$
$$\forall a \in V,\ 0 < \delta.$$

The number is
0 and the Extreme number is
0, for an independent SuperHyperSet in the setting of a dual strong 0-SuperHyperDefensive SuperHyperConnectivities.
(vi). $\emptyset$ is a dual connected SuperHyperDefensive SuperHyperConnectivities since the following statements are equivalent.

$$\forall a \in S,\ |(N_c(a) \cap S) - (N_c(a) \cap (V \setminus S))| < \delta \equiv$$
$$\forall a \in \emptyset,\ |(N_c(a) \cap \emptyset) - (N_c(a) \cap (V \setminus \emptyset))| < \delta \equiv$$
$$\forall a \in \emptyset,\ |(N_c(a) \cap \emptyset) - (N_c(a) \cap (V))| < \delta \equiv$$
$$\forall a \in \emptyset,\ |\emptyset| < \delta \equiv$$
$$\forall a \in V,\ 0 < \delta.$$

The number is
0 and the Extreme number is
0, for an independent SuperHyperSet in the setting of a dual connected 0-offensive SuperHyperDefensive SuperHyperConnectivities. ■

Proposition 10.0.28. *Let $ESHG : (V, E)$ be a Neutrosophic SuperHyperGraph which is SuperHyperComplete. Then there's no independent SuperHyperSet.*

Proposition 10.0.29. *Let $ESHG : (V, E)$ be a Neutrosophic SuperHyperGraph which is SuperHyperConnectivities/SuperHyperPath/SuperHyperWheel. The number is*
$\mathcal{O}(ESHG : (V, E))$ and the Extreme number is
$\mathcal{O}_n(ESHG : (V, E))$, in the setting of a dual

(i) : *SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected SuperHyperDefensive SuperHyperConnectivities;*

(iv) : *$\mathcal{O}(ESHG : (V, E))$-SuperHyperDefensive SuperHyperConnectivities;*

(v) : *strong $\mathcal{O}(ESHG : (V, E))$-SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected $\mathcal{O}(ESHG : (V, E))$-SuperHyperDefensive SuperHyperConnectivities.*

Proof. Suppose $ESHG : (V, E)$ is a Neutrosophic SuperHyperGraph which is SuperHyperConnectivities/SuperHyperPath/SuperHyperWheel.
(i). Consider one SuperHyperVertex is out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. This SuperHyperVertex has one SuperHyperNeighbor in S, i.e, suppose $x \in V \setminus S$

such that $y, z \in N(x)$. By it's SuperHyperConnectivities, $|N(x)| = |N(y)| = |N(z)| = 2$. Thus

$$\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv$$
$$\exists y \in V \setminus \{x\},\ |N(y) \cap S| < |N(y) \cap (V \setminus (V \setminus \{x\}))| \equiv$$
$$\exists y \in V \setminus \{x\},\ |N(y) \cap S| < |N(y) \cap \{x\})| \equiv$$
$$\exists y \in V \setminus \{x\},\ |\{z\}| < |\{x\})| \equiv$$
$$\exists y \in S,\ 1 < 1.$$

Thus it's contradiction. It implies every $V \setminus \{x\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperConnectivities.
Consider one SuperHyperVertex is out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. This SuperHyperVertex has one SuperHyperNeighbor in S, i.e, Suppose $x \in V \setminus S$ such that $y, z \in N(x)$. By it's SuperHyperPath, $|N(x)| = |N(y)| = |N(z)| = 2$. Thus

$$\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv$$
$$\exists y \in V \setminus \{x\},\ |N(y) \cap S| < |N(y) \cap (V \setminus (V \setminus \{x\}))| \equiv$$
$$\exists y \in V \setminus \{x\},\ |N(y) \cap S| < |N(y) \cap \{x\})| \equiv$$
$$\exists y \in V \setminus \{x\},\ |\{z\}| < |\{x\})| \equiv$$
$$\exists y \in S,\ 1 < 1.$$

Thus it's contradiction. It implies every $V \setminus \{x\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperPath.
Consider one SuperHyperVertex is out of S which is a dual SuperHyperDefensive SuperHyperConnectivities. This SuperHyperVertex has one SuperHyperNeighbor in S, i.e, Suppose $x \in V \setminus S$ such that $y, z \in N(x)$. By it's SuperHyperWheel, $|N(x)| = |N(y)| = |N(z)| = 2$. Thus

$$\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv$$
$$\forall a \in S,\ |N(a) \cap S| < |N(a) \cap (V \setminus S)| \equiv$$
$$\exists y \in V \setminus \{x\},\ |N(y) \cap S| < |N(y) \cap (V \setminus (V \setminus \{x\}))| \equiv$$
$$\exists y \in V \setminus \{x\},\ |N(y) \cap S| < |N(y) \cap \{x\})| \equiv$$
$$\exists y \in V \setminus \{x\},\ |\{z\}| < |\{x\})| \equiv$$
$$\exists y \in S,\ 1 < 1.$$

Thus it's contradiction. It implies every $V \setminus \{x\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperWheel.
(ii), (iii) are obvious by (i).
(iv). By (i), V is maximal and it's a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's a dual $\mathcal{O}(ESHG : (V, E))$-SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv).
Thus the number is
$\mathcal{O}(ESHG : (V, E))$ and the Extreme number is
$\mathcal{O}_n(ESHG : (V, E))$, in the setting of all types of a dual SuperHyperDefensive SuperHyperConnectivities. ■

Proposition 10.0.30. *Let $ESHG:(V,E)$ be a Neutrosophic SuperHyperGraph which is SuperHyperStar/complete SuperHyperBipartite/complete SuperHyperMultiPartite. The number is* $\frac{\mathcal{O}(ESHG:(V,E))}{2}+1$ *and the Extreme number is* $\min \Sigma_{v\in\{v_1,v_2,\cdots,v_t\}_{t>\frac{\mathcal{O}(ESHG:(V,E))}{2}}\subseteq V}\sigma(v)$, *in the setting of a dual*

(i) : *SuperHyperDefensive SuperHyperConnectivities;*

(ii) : *strong SuperHyperDefensive SuperHyperConnectivities;*

(iii) : *connected SuperHyperDefensive SuperHyperConnectivities;*

(iv) : $(\frac{\mathcal{O}(ESHG:(V,E))}{2}+1)$*-SuperHyperDefensive SuperHyperConnectivities;*

(v) : *strong* $(\frac{\mathcal{O}(ESHG:(V,E))}{2}+1)$*-SuperHyperDefensive SuperHyperConnectivities;*

(vi) : *connected* $(\frac{\mathcal{O}(ESHG:(V,E))}{2}+1)$*-SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Consider n half $+1$ SuperHyperVertices are in S which is SuperHyperDefensive SuperHyperConnectivities. A SuperHyperVertex has at most n half SuperHyperNeighbors in S. If the SuperHyperVertex is the non-SuperHyperCenter, then

$$\begin{aligned}&\forall a\in S,\ |N(a)\cap S|>|N(a)\cap(V\setminus S)|\equiv\\&\forall a\in S,\ 1>0.\end{aligned}$$

If the SuperHyperVertex is the SuperHyperCenter, then

$$\begin{aligned}&\forall a\in S,\ |N(a)\cap S|>|N(a)\cap(V\setminus S)|\equiv\\&\forall a\in S,\ \frac{n}{2}>\frac{n}{2}-1.\end{aligned}$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given SuperHyperStar.
Consider n half $+1$ SuperHyperVertices are in S which is a dual SuperHyperDefensive SuperHyperConnectivities.

$$\begin{aligned}&\forall a\in S,\ |N(a)\cap S|>|N(a)\cap(V\setminus S)|\equiv\\&\forall a\in S,\ \frac{\delta}{2}>n-\frac{\delta}{2}.\end{aligned}$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given complete SuperHyperBipartite which isn't a SuperHyperStar.
Consider n half $+1$ SuperHyperVertices are in S which is a dual SuperHyperDefensive SuperHyperConnectivities and they are chosen from different SuperHyperParts, equally or almost equally as possible. A SuperHyperVertex in S has δ half SuperHyperNeighbors in S.

$$\begin{aligned}&\forall a\in S,\ |N(a)\cap S|>|N(a)\cap(V\setminus S)|\equiv\\&\forall a\in S,\ \frac{\delta}{2}>n-\frac{\delta}{2}.\end{aligned}$$

Thus it's proved. It implies every S is a dual SuperHyperDefensive SuperHyperConnectivities in a given complete SuperHyperMultipartite which is neither a SuperHyperStar nor complete SuperHyperBipartite.
(ii), (iii) are obvious by (i).
(iv). By (i), $\{x_i\}_{i=1}^{\frac{\mathcal{O}(ESHG:(V,E))}{2}+1}$ is maximal and it's a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's a dual $\frac{\mathcal{O}(ESHG:(V,E))}{2}+1$-SuperHyperDefensive SuperHyperConnectivities.
$(v), (vi)$ are obvious by (iv).
Thus the number is
$\frac{\mathcal{O}(ESHG:(V,E))}{2}+1$ and the Extreme number is
$\min \Sigma_{v\in \{v_1,v_2,\cdots,v_t\}_{t>\frac{\mathcal{O}(ESHG:(V,E))}{2}} \subseteq V}\sigma(v)$, in the setting of all dual SuperHyperConnectivities. ■

Proposition 10.0.31. *Let $\mathcal{NSHF} : (V,E)$ be a SuperHyperFamily of the $ESHGs : (V,E)$ Neutrosophic SuperHyperGraphs which are from one-type SuperHyperClass which the result is obtained for the individuals. Then the results also hold for the SuperHyperFamily $\mathcal{NSHF} : (V,E)$ of these specific SuperHyperClasses of the Neutrosophic SuperHyperGraphs.*

Proof. There are neither SuperHyperConditions nor SuperHyperRestrictions on the SuperHyperVertices. Thus the SuperHyperResults on individuals, $ESHGs : (V,E)$, are extended to the SuperHyperResults on SuperHyperFamily, $\mathcal{NSHF} : (V,E)$. ■

Proposition 10.0.32. *Let $ESHG : (V,E)$ be a strong Neutrosophic SuperHyperGraph. If S is a dual SuperHyperDefensive SuperHyperConnectivities, then $\forall v \in V \setminus S,\ \exists x \in S$ such that*

(i) $v \in N_s(x)$;

(ii) $vx \in E$.

Proof. (i). Suppose $ESHG : (V,E)$ is a strong Neutrosophic SuperHyperGraph. Consider $v \in V \setminus S$. Since S is a dual SuperHyperDefensive SuperHyperConnectivities,

$$\begin{aligned}&\forall z \in V \setminus S,\ |N_s(z)\cap S| > |N_s(z)\cap (V\setminus S)|\\&v \in V \setminus S,\ |N_s(v)\cap S| > |N_s(v)\cap (V\setminus S)|\\&v \in V \setminus S, \exists x \in S,\ v \in N_s(x).\end{aligned}$$

(ii). Suppose $ESHG : (V,E)$ is a strong Neutrosophic SuperHyperGraph. Consider $v \in V \setminus S$. Since S is a dual SuperHyperDefensive SuperHyperConnectivities,

$$\begin{aligned}&\forall z \in V \setminus S,\ |N_s(z)\cap S| > |N_s(z)\cap (V\setminus S)|\\&v \in V \setminus S,\ |N_s(v)\cap S| > |N_s(v)\cap (V\setminus S)|\\&v \in V \setminus S, \exists x \in S :\ v \in N_s(x)\\&v \in V \setminus S, \exists x \in S : vx \in E,\ \mu(vx) = \sigma(v)\wedge\sigma(x).\\&v \in V \setminus S, \exists x \in S : vx \in E.\end{aligned}$$

■

Proposition 10.0.33. *Let $ESHG : (V, E)$ be a strong Neutrosophic SuperHyperGraph. If S is a dual SuperHyperDefensive SuperHyperConnectivities, then*

(i) *S is SuperHyperDominating set;*

(ii) *there's $S \subseteq S'$ such that $|S'|$ is SuperHyperChromatic number.*

Proof. (i). Suppose $ESHG : (V, E)$ is a strong Neutrosophic SuperHyperGraph. Consider $v \in V \setminus S$. Since S is a dual SuperHyperDefensive SuperHyperConnectivities, either

$$\begin{aligned}
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)| \\
&v \in V \setminus S,\ |N_s(v) \cap S| > |N_s(v) \cap (V \setminus S)| \\
&v \in V \setminus S, \exists x \in S,\ v \in N_s(x)
\end{aligned}$$

or

$$\begin{aligned}
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)| \\
&v \in V \setminus S,\ |N_s(v) \cap S| > |N_s(v) \cap (V \setminus S)| \\
&v \in V \setminus S, \exists x \in S :\ v \in N_s(x) \\
&v \in V \setminus S, \exists x \in S : vx \in E,\ \mu(vx) = \sigma(v) \wedge \sigma(x) \\
&v \in V \setminus S, \exists x \in S : vx \in E.
\end{aligned}$$

It implies S is SuperHyperDominating SuperHyperSet.
(ii). Suppose $ESHG : (V, E)$ is a strong Neutrosophic SuperHyperGraph. Consider $v \in V \setminus S$. Since S is a dual SuperHyperDefensive SuperHyperConnectivities, either

$$\begin{aligned}
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)| \\
&v \in V \setminus S,\ |N_s(v) \cap S| > |N_s(v) \cap (V \setminus S)| \\
&v \in V \setminus S, \exists x \in S,\ v \in N_s(x)
\end{aligned}$$

or

$$\begin{aligned}
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)| \\
&v \in V \setminus S,\ |N_s(v) \cap S| > |N_s(v) \cap (V \setminus S)| \\
&v \in V \setminus S, \exists x \in S :\ v \in N_s(x) \\
&v \in V \setminus S, \exists x \in S : vx \in E,\ \mu(vx) = \sigma(v) \wedge \sigma(x) \\
&v \in V \setminus S, \exists x \in S : vx \in E.
\end{aligned}$$

Thus every SuperHyperVertex $v \in V \setminus S$, has at least one SuperHyperNeighbor in S. The only case is about the relation amid SuperHyperVertices in S in the terms of SuperHyperNeighbors. It implies there's $S \subseteq S'$ such that $|S'|$ is SuperHyperChromatic number. ■

Proposition 10.0.34. *Let $ESHG : (V, E)$ be a strong Neutrosophic SuperHyperGraph. Then*

(i) $\Gamma \leq \mathcal{O}$;

(ii) $\Gamma_s \leq \mathcal{O}_n$.

Proof. (i). Suppose $ESHG : (V, E)$ is a strong Neutrosophic SuperHyperGraph. Let $S = V$.

$$\begin{aligned}
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|\\
&v \in V \setminus V,\ |N_s(v) \cap V| > |N_s(v) \cap (V \setminus V)|\\
&v \in \emptyset,\ |N_s(v) \cap V| > |N_s(v) \cap \emptyset|\\
&v \in \emptyset,\ |N_s(v) \cap V| > |\emptyset|\\
&v \in \emptyset,\ |N_s(v) \cap V| > 0
\end{aligned}$$

It implies V is a dual SuperHyperDefensive SuperHyperConnectivities. For all SuperHyperSets of SuperHyperVertices $S,\ S \subseteq V$. Thus for all SuperHyperSets of SuperHyperVertices $S,\ |S| \leq |V|$. It implies for all SuperHyperSets of SuperHyperVertices $S,\ |S| \leq \mathcal{O}$. So for all SuperHyperSets of SuperHyperVertices $S,\ \Gamma \leq \mathcal{O}$.
(ii). Suppose $ESHG : (V, E)$ is a strong Neutrosophic SuperHyperGraph. Let $S = V$.

$$\begin{aligned}
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|\\
&v \in V \setminus V,\ |N_s(v) \cap V| > |N_s(v) \cap (V \setminus V)|\\
&v \in \emptyset,\ |N_s(v) \cap V| > |N_s(v) \cap \emptyset|\\
&v \in \emptyset,\ |N_s(v) \cap V| > |\emptyset|\\
&v \in \emptyset,\ |N_s(v) \cap V| > 0
\end{aligned}$$

It implies V is a dual SuperHyperDefensive SuperHyperConnectivities. For all SuperHyperSets of Extreme SuperHyperVertices $S,\ S \subseteq V$. Thus for all SuperHyperSets of Extreme SuperHyperVertices $S,\ \Sigma_{s \in S} \Sigma_{i=1}^{3} \sigma_i(s) \leq \Sigma_{v \in V} \Sigma_{i=1}^{3} \sigma_i(v)$. It implies for all SuperHyperSets of Extreme SuperHyperVertices $S,\ \Sigma_{s \in S} \Sigma_{i=1}^{3} \sigma_i(s) \leq \mathcal{O}_n$. So for all SuperHyperSets of Extreme SuperHyperVertices $S,\ \Gamma_s \leq \mathcal{O}_n$. ■

Proposition 10.0.35. *Let $ESHG : (V, E)$ be a strong Neutrosophic SuperHyperGraph which is connected. Then*

(i) $\Gamma \leq \mathcal{O} - 1$;

(ii) $\Gamma_s \leq \mathcal{O}_n - \Sigma_{i=1}^{3} \sigma_i(x)$.

Proof. (i). Suppose $ESHG : (V, E)$ is a strong Neutrosophic SuperHyperGraph. Let $S = V - \{x\}$ where x is arbitrary and $x \in V$.

$$\begin{aligned}
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|\\
&v \in V \setminus V - \{x\},\ |N_s(v) \cap (V - \{x\})| > |N_s(v) \cap (V \setminus (V - \{x\}))|\\
&|N_s(x) \cap (V - \{x\})| > |N_s(x) \cap \{x\}|\\
&|N_s(x) \cap (V - \{x\})| > |\emptyset|\\
&|N_s(x) \cap (V - \{x\})| > 0
\end{aligned}$$

It implies $V - \{x\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. For all SuperHyperSets of SuperHyperVertices $S \neq V,\ S \subseteq V - \{x\}$. Thus for all SuperHyperSets of SuperHyperVertices $S \neq V,\ |S| \leq |V - \{x\}|$. It implies for all SuperHyperSets of SuperHyperVertices $S \neq V,\ |S| \leq \mathcal{O} - 1$. So for all SuperHyperSets of SuperHyperVertices $S,\ \Gamma \leq \mathcal{O} - 1$.

(ii). Suppose $ESHG:(V,E)$ is a strong Neutrosophic SuperHyperGraph. Let $S = V - \{x\}$ where x is arbitrary and $x \in V$.

$$\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|$$
$$v \in V \setminus V - \{x\},\ |N_s(v) \cap (V - \{x\})| > |N_s(v) \cap (V \setminus (V - \{x\}))|$$
$$|N_s(x) \cap (V - \{x\})| > |N_s(x) \cap \{x\}|$$
$$|N_s(x) \cap (V - \{x\})| > |\emptyset|$$
$$|N_s(x) \cap (V - \{x\})| > 0$$

It implies $V - \{x\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. For all SuperHyperSets of Extreme SuperHyperVertices $S \neq V,\ S \subseteq V - \{x\}$. Thus for all SuperHyperSets of Extreme SuperHyperVertices $S \neq V,\ \Sigma_{s \in S}\Sigma_{i=1}^{3}\sigma_i(s) \leq \Sigma_{v \in V - \{x\}}\Sigma_{i=1}^{3}\sigma_i(v)$. It implies for all SuperHyperSets of Extreme SuperHyperVertices $S \neq V,\ \Sigma_{s \in S}\Sigma_{i=1}^{3}\sigma_i(s) \leq \mathcal{O}_n - \Sigma_{i=1}^{3}\sigma_i(x)$. So for all SuperHyperSets of Extreme SuperHyperVertices $S,\ \Gamma_s \leq \mathcal{O}_n - \Sigma_{i=1}^{3}\sigma_i(x)$. ■

Proposition 10.0.36. *Let $ESHG:(V,E)$ be an odd SuperHyperPath. Then*

(i) the SuperHyperSet $S = \{v_2, v_4, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities;

(ii) $\Gamma = \lfloor \frac{n}{2} \rfloor + 1$ and corresponded SuperHyperSet is $S = \{v_2, v_4, \cdots, v_{n-1}\}$;

(iii) $\Gamma_s = \min\{\Sigma_{s \in S=\{v_2,v_4,\cdots,v_{n-1}\}}\Sigma_{i=1}^{3}\sigma_i(s), \Sigma_{s \in S=\{v_1,v_3,\cdots,v_{n-1}\}}\Sigma_{i=1}^{3}\sigma_i(s)\}$;

(iv) the SuperHyperSets $S_1 = \{v_2, v_4, \cdots, v_{n-1}\}$ and $S_2 = \{v_1, v_3, \cdots, v_{n-1}\}$ are only a dual SuperHyperConnectivities.

Proof. (i). Suppose $ESHG:(V,E)$ is an odd SuperHyperPath. Let $S = \{v_2, v_4, \cdots, v_{n-1}\}$ where for all $v_i, v_j \in \{v_2, v_4, \cdots, v_{n-1}\},\ v_iv_j \notin E$ and $v_i, v_j \in V$.

$$v \in \{v_1, v_3, \cdots, v_n\},\ |N_s(v) \cap \{v_2, v_4, \cdots .v_{n-1}\}| = 2 >$$
$$0 = |N_s(v) \cap \{v_1, v_3, \cdots, v_n\}| \forall z \in V \setminus S,\ |N_s(z) \cap S| = 2 >$$
$$0 = |N_s(z) \cap (V \setminus S)|$$
$$\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|$$
$$v \in V \setminus \{v_2, v_4, \cdots, v_{n-1}\},\ |N_s(v) \cap \{v_2, v_4, \cdots .v_{n-1}\}| >$$
$$|N_s(v) \cap (V \setminus \{v_2, v_4, \cdots .v_{n-1}\})|$$

It implies $S = \{v_2, v_4, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S = \{v_2, v_4, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_2, v_4, \cdots, v_{n-1}\}$, then

$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 = 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 \not> 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| \not> |N_s(z) \cap (V \setminus S)|.$$

So $\{v_2, v_4, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_2, v_4, \cdots, v_{n-1}\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S = \{v_2, v_4, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities.

(ii) and (iii) are trivial.
(iv). By (i), $S_1 = \{v_2, v_4, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's enough to show that $S_2 = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Suppose $ESHG : (V, E)$ is an odd SuperHyperPath. Let $S = \{v_1, v_3, \cdots, v_{n-1}\}$ where for all $v_i, v_j \in \{v_1, v_3, \cdots, v_{n-1}\},\ v_iv_j \not\in E$ and $v_i, v_j \in V$.

$$\begin{aligned}
&v \in \{v_2, v_4, \cdots, v_n\},\ |N_s(v) \cap \{v_1, v_3, \cdots .v_{n-1}\}| = 2 > \\
&0 = |N_s(v) \cap \{v_2, v_4, \cdots, v_n\}| \forall z \in V \setminus S,\ |N_s(z) \cap S| = 2 > 0 = |N_s(z) \cap (V \setminus S)| \\
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)| \\
&v \in V \setminus \{v_1, v_3, \cdots, v_{n-1}\},\ |N_s(v) \cap \{v_1, v_3, \cdots .v_{n-1}\}| > \\
&|N_s(v) \cap (V \setminus \{v_1, v_3, \cdots .v_{n-1}\})|
\end{aligned}$$

It implies $S = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S = \{v_1, v_3, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_1, v_3, \cdots, v_{n-1}\}$, then

$$\begin{aligned}
&\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 = 1 = |N_s(z) \cap (V \setminus S)| \\
&\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 \not> 1 = |N_s(z) \cap (V \setminus S)| \\
&\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| \not> |N_s(z) \cap (V \setminus S)|.
\end{aligned}$$

So $\{v_1, v_3, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_1, v_3, \cdots, v_{n-1}\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. ∎

Proposition 10.0.37. *Let $ESHG : (V, E)$ be an even SuperHyperPath. Then*

(i) *the set $S = \{v_2, v_4, \cdots .v_n\}$ is a dual SuperHyperDefensive SuperHyperConnectivities;*

(ii) *$\Gamma = \lfloor \frac{n}{2} \rfloor$ and corresponded SuperHyperSets are $\{v_2, v_4, \cdots .v_n\}$ and $\{v_1, v_3, \cdots .v_{n-1}\}$;*

(iii) $\Gamma_s = \min\{\Sigma_{s \in S = \{v_2, v_4, \cdots, v_n\}} \Sigma_{i=1}^{3} \sigma_i(s), \Sigma_{s \in S = \{v_1, v_3, \cdots .v_{n-1}\}} \Sigma_{i=1}^{3} \sigma_i(s)\}$;

(iv) *the SuperHyperSets $S_1 = \{v_2, v_4, \cdots .v_n\}$ and $S_2 = \{v_1, v_3, \cdots .v_{n-1}\}$ are only dual SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG : (V, E)$ is an even SuperHyperPath. Let $S = \{v_2, v_4, \cdots, v_n\}$ where for all $v_i, v_j \in \{v_2, v_4, \cdots, v_n\},\ v_iv_j \not\in E$ and $v_i, v_j \in V$.

$$\begin{aligned}
&v \in \{v_1, v_3, \cdots, v_{n-1}\},\ |N_s(v) \cap \{v_2, v_4, \cdots .v_n\}| = 2 > \\
&0 = |N_s(v) \cap \{v_1, v_3, \cdots, v_{n-1}\}| \forall z \in V \setminus S,\ |N_s(z) \cap S| = 2 > \\
&0 = |N_s(z) \cap (V \setminus S)| \\
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)| \\
&v \in V \setminus \{v_2, v_4, \cdots, v_n\},\ |N_s(v) \cap \{v_2, v_4, \cdots .v_n\}| > |N_s(v) \cap (V \setminus \{v_2, v_4, \cdots .v_n\})|
\end{aligned}$$

It implies $S = \{v_2, v_4, \cdots, v_n\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S = \{v_2, v_4, \cdots, v_n\} - \{v_i\}$ where $v_i \in \{v_2, v_4, \cdots, v_n\}$, then

$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 = 1 = |N_s(z) \cap (V \setminus S)|$$

$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 \not> 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| \not> |N_s(z) \cap (V \setminus S)|.$$

So $\{v_2, v_4, \cdots, v_n\} - \{v_i\}$ where $v_i \in \{v_2, v_4, \cdots, v_n\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S = \{v_2, v_4, \cdots, v_n\}$ is a dual SuperHyperDefensive SuperHyperConnectivities.
(ii) and (iii) are trivial.
(iv). By (i), $S_1 = \{v_2, v_4, \cdots, v_n\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's enough to show that $S_2 = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Suppose $ESHG : (V, E)$ is an even SuperHyperPath. Let $S = \{v_1, v_3, \cdots, v_{n-1}\}$ where for all $v_i, v_j \in \{v_1, v_3, \cdots, v_{n-1}\},\ v_iv_j \notin E$ and $v_i, v_j \in V$.

$$v \in \{v_2, v_4, \cdots, v_n\},\ |N_s(v) \cap \{v_1, v_3, \cdots .v_{n-1}\}| = 2 >$$
$$0 = |N_s(v) \cap \{v_2, v_4, \cdots, v_n\}| \forall z \in V \setminus S,\ |N_s(z) \cap S| = 2 > 0 = |N_s(z) \cap (V \setminus S)|$$
$$\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|$$
$$v \in V \setminus \{v_1, v_3, \cdots, v_{n-1}\},\ |N_s(v) \cap \{v_1, v_3, \cdots .v_{n-1}\}| >$$
$$|N_s(v) \cap (V \setminus \{v_1, v_3, \cdots .v_{n-1}\})|$$

It implies $S = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S = \{v_1, v_3, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_1, v_3, \cdots, v_{n-1}\}$, then

$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 = 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 \not> 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| \not> |N_s(z) \cap (V \setminus S)|.$$

So $\{v_1, v_3, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_1, v_3, \cdots, v_{n-1}\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. ■

Proposition 10.0.38. *Let $ESHG : (V, E)$ be an even SuperHyperConnectivities. Then*

(i) *the SuperHyperSet $S = \{v_2, v_4, \cdots, v_n\}$ is a dual SuperHyperDefensive SuperHyperConnectivities;*

(ii) $\Gamma = \lfloor \frac{n}{2} \rfloor$ *and corresponded SuperHyperSets are $\{v_2, v_4, \cdots, v_n\}$ and $\{v_1, v_3, \cdots, v_{n-1}\}$;*

(iii) $\Gamma_s = \min\{\Sigma_{s \in S = \{v_2, v_4, \cdots, v_n\}} \sigma(s), \Sigma_{s \in S = \{v_1, v_3, \cdots, v_{n-1}\}} \sigma(s)\}$;

(iv) *the SuperHyperSets $S_1 = \{v_2, v_4, \cdots, v_n\}$ and $S_2 = \{v_1, v_3, \cdots, v_{n-1}\}$ are only dual SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG : (V, E)$ is an even SuperHyperConnectivities. Let $S = \{v_2, v_4, \cdots, v_n\}$

where for all $v_i, v_j \in \{v_2, v_4, \cdots, v_n\},\ v_iv_j \notin E$ and $v_i, v_j \in V$.

$$v \in \{v_1, v_3, \cdots, v_{n-1}\},\ |N_s(v) \cap \{v_2, v_4, \cdots .v_n\}| = 2 >$$
$$0 = |N_s(v) \cap \{v_1, v_3, \cdots, v_{n-1}\}| \forall z \in V \setminus S,\ |N_s(z) \cap S| = 2 >$$
$$0 = |N_s(z) \cap (V \setminus S)|$$
$$\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|$$
$$v \in V \setminus \{v_2, v_4, \cdots, v_n\},\ |N_s(v) \cap \{v_2, v_4, \cdots .v_n\}| >$$
$$|N_s(v) \cap (V \setminus \{v_2, v_4, \cdots .v_n\})|$$

It implies $S = \{v_2, v_4, \cdots, v_n\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S = \{v_2, v_4, \cdots, v_n\} - \{v_i\}$ where $v_i \in \{v_2, v_4, \cdots, v_n\}$, then

$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 = 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 \not> 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| \not> |N_s(z) \cap (V \setminus S)|.$$

So $\{v_2, v_4, \cdots, v_n\} - \{v_i\}$ where $v_i \in \{v_2, v_4, \cdots, v_n\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S = \{v_2, v_4, \cdots, v_n\}$ is a dual SuperHyperDefensive SuperHyperConnectivities.
(ii) and (iii) are trivial.
(iv). By (i), $S_1 = \{v_2, v_4, \cdots, v_n\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's enough to show that $S_2 = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Suppose $ESHG : (V, E)$ is an even SuperHyperConnectivities. Let $S = \{v_1, v_3, \cdots, v_{n-1}\}$ where for all $v_i, v_j \in \{v_1, v_3, \cdots, v_{n-1}\},\ v_iv_j \notin E$ and $v_i, v_j \in V$.

$$v \in \{v_2, v_4, \cdots, v_n\},\ |N_s(v) \cap \{v_1, v_3, \cdots .v_{n-1}\}| = 2 >$$
$$0 = |N_s(v) \cap \{v_2, v_4, \cdots, v_n\}| \forall z \in V \setminus S,\ |N_s(z) \cap S| = 2 > 0 = |N_s(z) \cap (V \setminus S)|$$
$$\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|$$
$$v \in V \setminus \{v_1, v_3, \cdots, v_{n-1}\},\ |N_s(v) \cap \{v_1, v_3, \cdots .v_{n-1}\}| >$$
$$|N_s(v) \cap (V \setminus \{v_1, v_3, \cdots .v_{n-1}\})|$$

It implies $S = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S = \{v_1, v_3, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_1, v_3, \cdots, v_{n-1}\}$, then

$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 = 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 \not> 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| \not> |N_s(z) \cap (V \setminus S)|.$$

So $\{v_1, v_3, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_1, v_3, \cdots, v_{n-1}\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. ■

Proposition 10.0.39. *Let $ESHG : (V, E)$ be an odd SuperHyperConnectivities. Then*

(i) *the SuperHyperSet $S = \{v_2, v_4, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities;*

(ii) $\Gamma = \lfloor \frac{n}{2} \rfloor + 1$ *and corresponded SuperHyperSet is* $S = \{v_2, v_4, \cdots, v_{n-1}\}$;

(iii) $\Gamma_s = \min\{\Sigma_{s \in S=\{v_2,v_4,\cdots.v_{n-1}\}} \Sigma_{i=1}^3 \sigma_i(s), \Sigma_{s \in S=\{v_1,v_3,\cdots.v_{n-1}\}} \Sigma_{i=1}^3 \sigma_i(s)\}$;

(iv) *the SuperHyperSets* $S_1 = \{v_2, v_4, \cdots .v_{n-1}\}$ *and* $S_2 = \{v_1, v_3, \cdots .v_{n-1}\}$ *are only dual SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG : (V, E)$ is an odd SuperHyperConnectivities. Let $S = \{v_2, v_4, \cdots, v_{n-1}\}$ where for all $v_i, v_j \in \{v_2, v_4, \cdots, v_{n-1}\},\ v_iv_j \notin E$ and $v_i, v_j \in V$.

$$v \in \{v_1, v_3, \cdots, v_n\},\ |N_s(v) \cap \{v_2, v_4, \cdots .v_{n-1}\}| = 2 >$$
$$0 = |N_s(v) \cap \{v_1, v_3, \cdots, v_n\}| \forall z \in V \setminus S,\ |N_s(z) \cap S| = 2 > 0 = |N_s(z) \cap (V \setminus S)|$$
$$\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|$$
$$v \in V \setminus \{v_2, v_4, \cdots, v_{n-1}\},\ |N_s(v) \cap \{v_2, v_4, \cdots .v_{n-1}\}| >$$
$$|N_s(v) \cap (V \setminus \{v_2, v_4, \cdots .v_{n-1}\})|$$

It implies $S = \{v_2, v_4, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S = \{v_2, v_4, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_2, v_4, \cdots, v_{n-1}\}$, then

$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 = 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 \not> 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| \not> |N_s(z) \cap (V \setminus S)|.$$

So $\{v_2, v_4, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_2, v_4, \cdots, v_{n-1}\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S = \{v_2, v_4, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities.
(ii) and (iii) are trivial.
(iv). By (i), $S_1 = \{v_2, v_4, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's enough to show that $S_2 = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Suppose $ESHG : (V, E)$ is an odd SuperHyperConnectivities. Let $S = \{v_1, v_3, \cdots, v_{n-1}\}$ where for all $v_i, v_j \in \{v_1, v_3, \cdots, v_{n-1}\},\ v_iv_j \notin E$ and $v_i, v_j \in V$.

$$v \in \{v_2, v_4, \cdots, v_n\},\ |N_s(v) \cap \{v_1, v_3, \cdots .v_{n-1}\}| = 2 >$$
$$0 = |N_s(v) \cap \{v_2, v_4, \cdots, v_n\}| \forall z \in V \setminus S,\ |N_s(z) \cap S| = 2 > 0 = |N_s(z) \cap (V \setminus S)|$$
$$\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|$$
$$v \in V \setminus \{v_1, v_3, \cdots, v_{n-1}\},\ |N_s(v) \cap \{v_1, v_3, \cdots .v_{n-1}\}| >$$
$$|N_s(v) \cap (V \setminus \{v_1, v_3, \cdots .v_{n-1}\})|$$

It implies $S = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S = \{v_1, v_3, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_1, v_3, \cdots, v_{n-1}\}$, then

$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 = 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| = 1 \not> 1 = |N_s(z) \cap (V \setminus S)|$$
$$\exists v_{i+1} \in V \setminus S,\ |N_s(z) \cap S| \not> |N_s(z) \cap (V \setminus S)|.$$

So $\{v_1, v_3, \cdots, v_{n-1}\} - \{v_i\}$ where $v_i \in \{v_1, v_3, \cdots, v_{n-1}\}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S = \{v_1, v_3, \cdots, v_{n-1}\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. ■

Proposition 10.0.40. *Let $ESHG:(V,E)$ be SuperHyperStar. Then*

(i) *the SuperHyperSet $S=\{c\}$ is a dual maximal SuperHyperConnectivities;*

(ii) $\Gamma=1$;

(iii) $\Gamma_s=\Sigma_{i=1}^{3}\sigma_i(c)$;

(iv) *the SuperHyperSets $S=\{c\}$ and $S\subset S'$ are only dual SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG:(V,E)$ is a SuperHyperStar.

$$\begin{aligned}
&\forall v\in V\setminus\{c\},\ |N_s(v)\cap\{c\}|=1>\\
&0=|N_s(v)\cap(V\setminus\{c\})|\forall z\in V\setminus S,\ |N_s(z)\cap S|=1>\\
&0=|N_s(z)\cap(V\setminus S)|\\
&\forall z\in V\setminus S,\ |N_s(z)\cap S|>|N_s(z)\cap(V\setminus S)|\\
&v\in V\setminus\{c\},\ |N_s(v)\cap\{c\}|>|N_s(v)\cap(V\setminus\{c\})|
\end{aligned}$$

It implies $S=\{c\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S=\{c\}-\{c\}=\emptyset$, then

$$\begin{aligned}
&\exists v\in V\setminus S,\ |N_s(z)\cap S|=0=0=|N_s(z)\cap(V\setminus S)|\\
&\exists v\in V\setminus S,\ |N_s(z)\cap S|=0\not>0=|N_s(z)\cap(V\setminus S)|\\
&\exists v\in V\setminus S,\ |N_s(z)\cap S|\not>|N_s(z)\cap(V\setminus S)|.
\end{aligned}$$

So $S=\{c\}-\{c\}=\emptyset$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S=\{c\}$ is a dual SuperHyperDefensive SuperHyperConnectivities.
(ii) and (iii) are trivial.
(iv). By (i), $S=\{c\}$ is a dual SuperHyperDefensive SuperHyperConnectivities. Thus it's enough to show that $S\subseteq S'$ is a dual SuperHyperDefensive SuperHyperConnectivities. Suppose $ESHG:(V,E)$ is a SuperHyperStar. Let $S\subseteq S'$.

$$\begin{aligned}
&\forall v\in V\setminus\{c\},\ |N_s(v)\cap\{c\}|=1>\\
&0=|N_s(v)\cap(V\setminus\{c\})|\forall z\in V\setminus S',\ |N_s(z)\cap S'|=1>\\
&0=|N_s(z)\cap(V\setminus S')|\\
&\forall z\in V\setminus S',\ |N_s(z)\cap S'|>|N_s(z)\cap(V\setminus S')|
\end{aligned}$$

It implies $S'\subseteq S$ is a dual SuperHyperDefensive SuperHyperConnectivities. ∎

Proposition 10.0.41. *Let $ESHG:(V,E)$ be SuperHyperWheel. Then*

(i) *the SuperHyperSet $S=\{v_1,v_3\}\cup\{v_6,v_9\cdots,v_{i+6},\cdots,v_n\}_{i=1}^{6+3(i-1)\leq n}$ is a dual maximal SuperHyperDefensive SuperHyperConnectivities;*

(ii) $\Gamma=|\{v_1,v_3\}\cup\{v_6,v_9\cdots,v_{i+6},\cdots,v_n\}_{i=1}^{6+3(i-1)\leq n}|$;

(iii) $\Gamma_s=\Sigma_{\{v_1,v_3\}\cup\{v_6,v_9\cdots,v_{i+6},\cdots,v_n\}_{i=1}^{6+3(i-1)\leq n}}\Sigma_{i=1}^{3}\sigma_i(s)$;

(iv) *the SuperHyperSet* $\{v_1, v_3\} \cup \{v_6, v_9 \cdots, v_{i+6}, \cdots, v_n\}_{i=1}^{6+3(i-1)\leq n}$ *is only a dual maximal SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG : (V, E)$ is a SuperHyperWheel. Let $S = \{v_1, v_3\} \cup \{v_6, v_9 \cdots, v_{i+6}, \cdots, v_n\}_{i=1}^{6+3(i-1)\leq n}$. There are either

$$\forall z \in V \setminus S,\ |N_s(z) \cap S| = 2 > 1 = |N_s(z) \cap (V \setminus S)|$$
$$\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|$$

or

$$\forall z \in V \setminus S,\ |N_s(z) \cap S| = 3 > 0 = |N_s(z) \cap (V \setminus S)|$$
$$\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|$$

It implies $S = \{v_1, v_3\} \cup \{v_6, v_9 \cdots, v_{i+6}, \cdots, v_n\}_{i=1}^{6+3(i-1)\leq n}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S' = \{v_1, v_3\} \cup \{v_6, v_9 \cdots, v_{i+6}, \cdots, v_n\}_{i=1}^{6+3(i-1)\leq n} - \{z\}$ where $z \in S = \{v_1, v_3\} \cup \{v_6, v_9 \cdots, v_{i+6}, \cdots, v_n\}_{i=1}^{6+3(i-1)\leq n}$, then There are either

$$\forall z \in V \setminus S',\ |N_s(z) \cap S'| = 1 < 2 = |N_s(z) \cap (V \setminus S')|$$
$$\forall z \in V \setminus S',\ |N_s(z) \cap S'| < |N_s(z) \cap (V \setminus S')|$$
$$\forall z \in V \setminus S',\ |N_s(z) \cap S'| \not> |N_s(z) \cap (V \setminus S')|$$

or

$$\forall z \in V \setminus S',\ |N_s(z) \cap S'| = 1 = 1 = |N_s(z) \cap (V \setminus S')|$$
$$\forall z \in V \setminus S',\ |N_s(z) \cap S'| = |N_s(z) \cap (V \setminus S')|$$
$$\forall z \in V \setminus S',\ |N_s(z) \cap S'| \not> |N_s(z) \cap (V \setminus S')|$$

So $S' = \{v_1, v_3\} \cup \{v_6, v_9 \cdots, v_{i+6}, \cdots, v_n\}_{i=1}^{6+3(i-1)\leq n} - \{z\}$ where $z \in S = \{v_1, v_3\} \cup \{v_6, v_9 \cdots, v_{i+6}, \cdots, v_n\}_{i=1}^{6+3(i-1)\leq n}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S = \{v_1, v_3\} \cup \{v_6, v_9 \cdots, v_{i+6}, \cdots, v_n\}_{i=1}^{6+3(i-1)\leq n}$ is a dual maximal SuperHyperDefensive SuperHyperConnectivities.
(ii), (iii) and (iv) are obvious. ∎

Proposition 10.0.42. *Let* $ESHG : (V, E)$ *be an odd SuperHyperComplete. Then*

(i) *the SuperHyperSet* $S = \{v_i\}_{i=1}^{\lfloor \frac{n}{2} \rfloor + 1}$ *is a dual SuperHyperDefensive SuperHyperConnectivities;*

(ii) $\Gamma = \lfloor \frac{n}{2} \rfloor + 1$;

(iii) $\Gamma_s = \min\{\Sigma_{s \in S} \Sigma_{i=1}^{3} \sigma_i(s)\}_{S = \{v_i\}_{i=1}^{\lfloor \frac{n}{2} \rfloor + 1}}$;

(iv) *the SuperHyperSet* $S = \{v_i\}_{i=1}^{\lfloor \frac{n}{2} \rfloor + 1}$ *is only a dual SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG:(V,E)$ is an odd SuperHyperComplete. Let $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$. Thus

$$\forall z\in V\setminus S,\ |N_s(z)\cap S|=\lfloor\frac{n}{2}\rfloor+1>\lfloor\frac{n}{2}\rfloor-1=|N_s(z)\cap(V\setminus S)|$$
$$\forall z\in V\setminus S,\ |N_s(z)\cap S|>|N_s(z)\cap(V\setminus S)|$$

It implies $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S'=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}-\{z\}$ where $z\in S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$, then

$$\forall z\in V\setminus S,\ |N_s(z)\cap S|=\lfloor\frac{n}{2}\rfloor=\lfloor\frac{n}{2}\rfloor=|N_s(z)\cap(V\setminus S)|$$
$$\forall z\in V\setminus S,\ |N_s(z)\cap S|\not>|N_s(z)\cap(V\setminus S)|$$

So $S'=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}-\{z\}$ where $z\in S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$ is a dual SuperHyperDefensive SuperHyperConnectivities.
(ii), (iii) and (iv) are obvious. ■

Proposition 10.0.43. *Let $ESHG:(V,E)$ be an even SuperHyperComplete. Then*

(i) *the SuperHyperSet $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$ is a dual SuperHyperDefensive SuperHyperConnectivities;*

(ii) $\Gamma=\lfloor\frac{n}{2}\rfloor$;

(iii) $\Gamma_s=\min\{\Sigma_{s\in S}\Sigma_{i=1}^{3}\sigma_i(s)\}_{S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}}$;

(iv) *the SuperHyperSet $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$ is only a dual maximal SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG:(V,E)$ is an even SuperHyperComplete. Let $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$. Thus

$$\forall z\in V\setminus S,\ |N_s(z)\cap S|=\lfloor\frac{n}{2}\rfloor>\lfloor\frac{n}{2}\rfloor-1=|N_s(z)\cap(V\setminus S)|$$
$$\forall z\in V\setminus S,\ |N_s(z)\cap S|>|N_s(z)\cap(V\setminus S)|.$$

It implies $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$ is a dual SuperHyperDefensive SuperHyperConnectivities. If $S'=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}-\{z\}$ where $z\in S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$, then

$$\forall z\in V\setminus S,\ |N_s(z)\cap S|=\lfloor\frac{n}{2}\rfloor-1<\lfloor\frac{n}{2}\rfloor+1=|N_s(z)\cap(V\setminus S)|$$
$$\forall z\in V\setminus S,\ |N_s(z)\cap S|\not>|N_s(z)\cap(V\setminus S)|.$$

So $S'=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}-\{z\}$ where $z\in S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities. It induces $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$ is a dual maximal SuperHyperDefensive SuperHyperConnectivities.
(ii), (iii) and (iv) are obvious. ■

Proposition 10.0.44. *Let $\mathcal{NSHF}:(V,E)$ be a m-SuperHyperFamily of Extreme SuperHyperStars with common Extreme SuperHyperVertex SuperHyperSet. Then*

(i) *the SuperHyperSet $S = \{c_1, c_2, \cdots, c_m\}$ is a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF}$;*

(ii) $\Gamma = m$ *for* $\mathcal{NSHF} : (V, E)$;

(iii) $\Gamma_s = \Sigma_{i=1}^{m}\Sigma_{j=1}^{3}\sigma_j(c_i)$ *for* $\mathcal{NSHF} : (V, E)$;

(iv) *the SuperHyperSets $S = \{c_1, c_2, \cdots, c_m\}$ and $S \subset S'$ are only dual SuperHyperConnectivities for $\mathcal{NSHF} : (V, E)$.*

Proof. (i). Suppose $ESHG : (V, E)$ is a SuperHyperStar.

$$\begin{aligned}
&\forall v \in V \setminus \{c\},\ |N_s(v) \cap \{c\}| = 1 >\\
&0 = |N_s(v) \cap (V \setminus \{c\})| \forall z \in V \setminus S,\ |N_s(z) \cap S| = 1 >\\
&0 = |N_s(z) \cap (V \setminus S)|\\
&\forall z \in V \setminus S,\ |N_s(z) \cap S| > |N_s(z) \cap (V \setminus S)|\\
&v \in V \setminus \{c\},\ |N_s(v) \cap \{c\}| > |N_s(v) \cap (V \setminus \{c\})|
\end{aligned}$$

It implies $S = \{c_1, c_2, \cdots, c_m\}$ is a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF} : (V, E)$. If $S = \{c\} - \{c\} = \emptyset$, then

$$\begin{aligned}
&\exists v \in V \setminus S,\ |N_s(z) \cap S| = 0 = 0 = |N_s(z) \cap (V \setminus S)|\\
&\exists v \in V \setminus S,\ |N_s(z) \cap S| = 0 \not> 0 = |N_s(z) \cap (V \setminus S)|\\
&\exists v \in V \setminus S,\ |N_s(z) \cap S| \not> |N_s(z) \cap (V \setminus S)|.
\end{aligned}$$

So $S = \{c\} - \{c\} = \emptyset$ isn't a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF} : (V, E)$. It induces $S = \{c_1, c_2, \cdots, c_m\}$ is a dual maximal SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF} : (V, E)$.
(ii) and (iii) are trivial.
(iv). By (i), $S = \{c_1, c_2, \cdots, c_m\}$ is a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF} : (V, E)$. Thus it's enough to show that $S \subseteq S'$ is a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF} : (V, E)$. Suppose $ESHG : (V, E)$ is a SuperHyperStar. Let $S \subseteq S'$.

$$\begin{aligned}
&\forall v \in V \setminus \{c\},\ |N_s(v) \cap \{c\}| = 1 >\\
&0 = |N_s(v) \cap (V \setminus \{c\})| \forall z \in V \setminus S',\ |N_s(z) \cap S'| = 1 >\\
&0 = |N_s(z) \cap (V \setminus S')|\\
&\forall z \in V \setminus S',\ |N_s(z) \cap S'| > |N_s(z) \cap (V \setminus S')|
\end{aligned}$$

It implies $S' \subseteq S$ is a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF} : (V, E)$. ■

Proposition 10.0.45. *Let $\mathcal{NSHF} : (V, E)$ be an m-SuperHyperFamily of odd SuperHyperComplete SuperHyperGraphs with common Extreme SuperHyperVertex SuperHyperSet. Then*

(i) *the SuperHyperSet $S = \{v_i\}_{i=1}^{\lfloor \frac{n}{2} \rfloor + 1}$ is a dual maximal SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF}$;*

(ii) $\Gamma = \lfloor \frac{n}{2} \rfloor + 1$ *for* $\mathcal{NSHF} : (V, E)$;

(*iii*) $\Gamma_s = \min\{\Sigma_{s\in S}\Sigma_{i=1}^{3}\sigma_i(s)\}_{S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}}$ *for* $\mathcal{NSHF}:(V,E)$;

(*iv*) *the SuperHyperSets* $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$ *are only a dual maximal SuperHyperConnectivities for* $\mathcal{NSHF}:(V,E)$.

Proof. (i). Suppose $ESHG:(V,E)$ is odd SuperHyperComplete. Let $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$. Thus

$$\forall z\in V\setminus S,\ |N_s(z)\cap S| = \lfloor \frac{n}{2}\rfloor+1 > \lfloor \frac{n}{2}\rfloor-1 = |N_s(z)\cap (V\setminus S)|$$
$$\forall z\in V\setminus S,\ |N_s(z)\cap S| > |N_s(z)\cap (V\setminus S)|$$

It implies $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$ is a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF}:(V,E)$. If $S'=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}-\{z\}$ where $z\in S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$, then

$$\forall z\in V\setminus S,\ |N_s(z)\cap S| = \lfloor \frac{n}{2}\rfloor = \lfloor \frac{n}{2}\rfloor = |N_s(z)\cap (V\setminus S)|$$
$$\forall z\in V\setminus S,\ |N_s(z)\cap S| \not> |N_s(z)\cap (V\setminus S)|$$

So $S'=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}-\{z\}$ where $z\in S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF}:(V,E)$. It induces $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor+1}$ is a dual maximal SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF}:(V,E)$.
(ii), (iii) and (iv) are obvious. ∎

Proposition 10.0.46. *Let* $\mathcal{NSHF}:(V,E)$ *be a m-SuperHyperFamily of even SuperHyperComplete SuperHyperGraphs with common Extreme SuperHyperVertex SuperHyperSet. Then*

(*i*) *the SuperHyperSet* $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$ *is a dual SuperHyperDefensive SuperHyperConnectivities for* $\mathcal{NSHF}:(V,E)$;

(*ii*) $\Gamma=\lfloor \frac{n}{2}\rfloor$ *for* $\mathcal{NSHF}:(V,E)$;

(*iii*) $\Gamma_s = \min\{\Sigma_{s\in S}\Sigma_{i=1}^{3}\sigma_i(s)\}_{S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}}$ *for* $\mathcal{NSHF}:(V,E)$;

(*iv*) *the SuperHyperSets* $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$ *are only dual maximal SuperHyperConnectivities for* $\mathcal{NSHF}:(V,E)$.

Proof. (i). Suppose $ESHG:(V,E)$ is even SuperHyperComplete. Let $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$. Thus

$$\forall z\in V\setminus S,\ |N_s(z)\cap S| = \lfloor \frac{n}{2}\rfloor > \lfloor \frac{n}{2}\rfloor-1 = |N_s(z)\cap (V\setminus S)|$$
$$\forall z\in V\setminus S,\ |N_s(z)\cap S| > |N_s(z)\cap (V\setminus S)|.$$

It implies $S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$ is a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF}:(V,E)$. If $S'=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}-\{z\}$ where $z\in S=\{v_i\}_{i=1}^{\lfloor \frac{n}{2}\rfloor}$, then

$$\forall z\in V\setminus S,\ |N_s(z)\cap S| = \lfloor \frac{n}{2}\rfloor-1 < \lfloor \frac{n}{2}\rfloor+1 = |N_s(z)\cap (V\setminus S)|$$
$$\forall z\in V\setminus S,\ |N_s(z)\cap S| \not> |N_s(z)\cap (V\setminus S)|.$$

So $S' = \{v_i\}_{i=1}^{\lfloor \frac{n}{2} \rfloor} - \{z\}$ where $z \in S = \{v_i\}_{i=1}^{\lfloor \frac{n}{2} \rfloor}$ isn't a dual SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF} : (V, E)$. It induces $S = \{v_i\}_{i=1}^{\lfloor \frac{n}{2} \rfloor}$ is a dual maximal SuperHyperDefensive SuperHyperConnectivities for $\mathcal{NSHF} : (V, E)$.
(ii), (iii) and (iv) are obvious. ■

Proposition 10.0.47. *Let $ESHG : (V, E)$ be a strong Neutrosophic SuperHyperGraph. Then following statements hold;*

(i) *if $s \geq t$ and a SuperHyperSet S of SuperHyperVertices is an t-SuperHyperDefensive SuperHyperConnectivities, then S is an s-SuperHyperDefensive SuperHyperConnectivities;*

(ii) *if $s \leq t$ and a SuperHyperSet S of SuperHyperVertices is a dual t-SuperHyperDefensive SuperHyperConnectivities, then S is a dual s-SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG : (V, E)$ is a strong Neutrosophic SuperHyperGraph. Consider a SuperHyperSet S of SuperHyperVertices is an t-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < t;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < t \leq s;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < s.$$

Thus S is an s-SuperHyperDefensive SuperHyperConnectivities.
(ii). Suppose $ESHG : (V, E)$ is a strong Neutrosophic SuperHyperGraph. Consider a SuperHyperSet S of SuperHyperVertices is a dual t-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > t;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > t \geq s;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > s.$$

Thus S is a dual s-SuperHyperDefensive SuperHyperConnectivities. ■

Proposition 10.0.48. *Let $ESHG : (V, E)$ be a strong Neutrosophic SuperHyperGraph. Then following statements hold;*

(i) *if $s \geq t + 2$ and a SuperHyperSet S of SuperHyperVertices is an t-SuperHyperDefensive SuperHyperConnectivities, then S is an s-SuperHyperPowerful SuperHyperConnectivities;*

(ii) *if $s \leq t$ and a SuperHyperSet S of SuperHyperVertices is a dual t-SuperHyperDefensive SuperHyperConnectivities, then S is a dual s-SuperHyperPowerful SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG : (V, E)$ is a strong Neutrosophic SuperHyperGraph. Consider a SuperHyperSet S of SuperHyperVertices is an t-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < t;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < t \leq t + 2 \leq s;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < s.$$

Thus S is an $(t+2)-$SuperHyperDefensive SuperHyperConnectivities. By S is an $s-$SuperHyperDefensive SuperHyperConnectivities and S is a dual $(s+2)-$SuperHyperDefensive SuperHyperConnectivities, S is an s-SuperHyperPowerful SuperHyperConnectivities.
(ii). Suppose $ESHG:(V,E)$ is a strong Neutrosophic SuperHyperGraph. Consider a SuperHyperSet S of SuperHyperVertices is a dual t-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > t;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > t \geq s > s-2;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > s-2.$$

Thus S is an $(s-2)-$SuperHyperDefensive SuperHyperConnectivities. By S is an $(s-2)-$SuperHyperDefensive SuperHyperConnectivities and S is a dual $s-$SuperHyperDefensive SuperHyperConnectivities, S is an $s-$SuperHyperPowerful SuperHyperConnectivities. ∎

Proposition 10.0.49. *Let $ESHG:(V,E)$ be a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph. Then following statements hold;*

(i) *if $\forall a \in S,\ |N_s(a) \cap S| < \lfloor \frac{r}{2} \rfloor + 1$, then $ESHG:(V,E)$ is an 2-SuperHyperDefensive SuperHyperConnectivities;*

(ii) *if $\forall a \in V \setminus S,\ |N_s(a) \cap S| > \lfloor \frac{r}{2} \rfloor + 1$, then $ESHG:(V,E)$ is a dual 2-SuperHyperDefensive SuperHyperConnectivities;*

(iii) *if $\forall a \in S,\ |N_s(a) \cap V \setminus S| = 0$, then $ESHG:(V,E)$ is an r-SuperHyperDefensive SuperHyperConnectivities;*

(iv) *if $\forall a \in V \setminus S,\ |N_s(a) \cap V \setminus S| = 0$, then $ESHG:(V,E)$ is a dual r-SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph. Then

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < \lfloor \frac{r}{2} \rfloor + 1 - (\lfloor \frac{r}{2} \rfloor - 1);$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < \lfloor \frac{r}{2} \rfloor + 1 - (\lfloor \frac{r}{2} \rfloor - 1) < 2;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2.$$

Thus S is an 2-SuperHyperDefensive SuperHyperConnectivities.
(ii). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > \lfloor \frac{r}{2} \rfloor + 1 - (\lfloor \frac{r}{2} \rfloor - 1);$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > \lfloor \frac{r}{2} \rfloor + 1 - (\lfloor \frac{r}{2} \rfloor - 1) > 2;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2.$$

Thus S is a dual 2-SuperHyperDefensive SuperHyperConnectivities.
(iii). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph. Then

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < r - 0;$$

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < r - 0 = r;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < r.$$

Thus S is an r-SuperHyperDefensive SuperHyperConnectivities.
(iv). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > r - 0;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > r - 0 = r;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > r.$$

Thus S is a dual r-SuperHyperDefensive SuperHyperConnectivities. ■

Proposition 10.0.50. *Let $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph. Then following statements hold;*

(i) $\forall a \in S,\ |N_s(a) \cap S| < \lfloor \frac{r}{2} \rfloor + 1$ *if $ESHG : (V, E)$ is an 2-SuperHyperDefensive SuperHyperConnectivities;*

(ii) $\forall a \in V \setminus S,\ |N_s(a) \cap S| > \lfloor \frac{r}{2} \rfloor + 1$ *if $ESHG : (V, E)$ is a dual 2-SuperHyperDefensive SuperHyperConnectivities;*

(iii) $\forall a \in S,\ |N_s(a) \cap V \setminus S| = 0$ *if $ESHG : (V, E)$ is an r-SuperHyperDefensive SuperHyperConnectivities;*

(iv) $\forall a \in V \setminus S,\ |N_s(a) \cap V \setminus S| = 0$ *if $ESHG : (V, E)$ is a dual r-SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph. Then

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2 = \lfloor \frac{r}{2} \rfloor + 1 - (\lfloor \frac{r}{2} \rfloor - 1);$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < \lfloor \frac{r}{2} \rfloor + 1 - (\lfloor \frac{r}{2} \rfloor - 1);$$
$$\forall t \in S,\ |N_s(t) \cap S| = \lfloor \frac{r}{2} \rfloor + 1,\ |N_s(t) \cap (V \setminus S)| = \lfloor \frac{r}{2} \rfloor - 1.$$

(ii). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and a dual 2-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2 = \lfloor \frac{r}{2} \rfloor + 1 - (\lfloor \frac{r}{2} \rfloor - 1);$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > \lfloor \frac{r}{2} \rfloor + 1 - (\lfloor \frac{r}{2} \rfloor - 1);$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| = \lfloor \frac{r}{2} \rfloor + 1,\ |N_s(t) \cap (V \setminus S) = \lfloor \frac{r}{2} \rfloor - 1.$$

(iii). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and an r-SuperHyperDefensive SuperHyperConnectivities.

$$\begin{aligned}
&\forall t\in S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|<r;\\
&\forall t\in S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|<r=r-0;\\
&\forall t\in S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|<r-0;\\
&\forall t\in S,\ |N_s(t)\cap S|=r,\ |N_s(t)\cap (V\setminus S)|=0.
\end{aligned}$$

(iv). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and a dual r-SuperHyperDefensive SuperHyperConnectivities. Then

$$\begin{aligned}
&\forall t\in V\setminus S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|>r;\\
&\forall t\in V\setminus S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|>r=r-0;\\
&\forall t\in V\setminus S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|>r-0;\\
&\forall t\in V\setminus S,\ |N_s(t)\cap S|=r,\ |N_s(t)\cap (V\setminus S)|=0.
\end{aligned}$$

■

Proposition 10.0.51. *Let $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is a SuperHyperComplete. Then following statements hold;*

(i) $\forall a\in S,\ |N_s(a)\cap S|<\lfloor\frac{\mathcal{O}-1}{2}\rfloor+1$ *if $ESHG:(V,E)$ is an 2-SuperHyperDefensive SuperHyperConnectivities;*

(ii) $\forall a\in V\setminus S,\ |N_s(a)\cap S|>\lfloor\frac{\mathcal{O}-1}{2}\rfloor+1$ *if $ESHG:(V,E)$ is a dual 2-SuperHyperDefensive SuperHyperConnectivities;*

(iii) $\forall a\in S,\ |N_s(a)\cap V\setminus S|=0$ *if $ESHG:(V,E)$ is an $(\mathcal{O}-1)$-SuperHyperDefensive SuperHyperConnectivities;*

(iv) $\forall a\in V\setminus S,\ |N_s(a)\cap V\setminus S|=0$ *if $ESHG:(V,E)$ is a dual $(\mathcal{O}-1)$-SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and an 2- SuperHyperDefensive SuperHyperConnectivities. Then

$$\begin{aligned}
&\forall t\in S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|<2;\\
&\forall t\in S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|<2=\lfloor\frac{\mathcal{O}-1}{2}\rfloor+1-(\lfloor\frac{\mathcal{O}-1}{2}\rfloor-1);\\
&\forall t\in S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|<\lfloor\frac{\mathcal{O}-1}{2}\rfloor+1-(\lfloor\frac{\mathcal{O}-1}{2}\rfloor-1);\\
&\forall t\in S,\ |N_s(t)\cap S|=\lfloor\frac{\mathcal{O}-1}{2}\rfloor+1,\ |N_s(t)\cap (V\setminus S)|=\lfloor\frac{\mathcal{O}-1}{2}\rfloor-1.
\end{aligned}$$

(ii). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and a dual 2-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t\in V\setminus S,\ |N_s(t)\cap S|-|N_s(t)\cap (V\setminus S)|>2;$$

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2 = \lfloor \frac{\mathcal{O}-1}{2} \rfloor + 1 - (\lfloor \frac{\mathcal{O}-1}{2} \rfloor - 1);$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > \lfloor \frac{\mathcal{O}-1}{2} \rfloor + 1 - (\lfloor \frac{\mathcal{O}-1}{2} \rfloor - 1);$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| = \lfloor \frac{\mathcal{O}-1}{2} \rfloor + 1,\ |N_s(t) \cap (V \setminus S)| = \lfloor \frac{\mathcal{O}-1}{2} \rfloor - 1.$$

(iii). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and an $(\mathcal{O} - 1)$-SuperHyperDefensive SuperHyperConnectivities.

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < \mathcal{O} - 1;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < \mathcal{O} - 1 = \mathcal{O} - 1 - 0;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < \mathcal{O} - 1 - 0;$$
$$\forall t \in S,\ |N_s(t) \cap S| = \mathcal{O} - 1,\ |N_s(t) \cap (V \setminus S)| = 0.$$

(iv). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and a dual r-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > \mathcal{O} - 1;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > \mathcal{O} - 1 = \mathcal{O} - 1 - 0;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > \mathcal{O} - 1 - 0;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| = \mathcal{O} - 1,\ |N_s(t) \cap (V \setminus S)| = 0.$$

■

Proposition 10.0.52. *Let $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is a SuperHyperComplete. Then following statements hold;*

(i) if $\forall a \in S,\ |N_s(a) \cap S| < \lfloor \frac{\mathcal{O}-1}{2} \rfloor + 1$, then $ESHG : (V, E)$ is an 2-SuperHyperDefensive SuperHyperConnectivities;

(ii) if $\forall a \in V \setminus S,\ |N_s(a) \cap S| > \lfloor \frac{\mathcal{O}-1}{2} \rfloor + 1$, then $ESHG : (V, E)$ is a dual 2-SuperHyperDefensive SuperHyperConnectivities;

(iii) if $\forall a \in S,\ |N_s(a) \cap V \setminus S| = 0$, then $ESHG : (V, E)$ is $(\mathcal{O} - 1)$-SuperHyperDefensive SuperHyperConnectivities;

(iv) if $\forall a \in V \setminus S,\ |N_s(a) \cap V \setminus S| = 0$, then $ESHG : (V, E)$ is a dual $(\mathcal{O} - 1)$-SuperHyperDefensive SuperHyperConnectivities.

Proof. (i). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is a SuperHyperComplete. Then

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < \lfloor \frac{\mathcal{O}-1}{2} \rfloor + 1 - (\lfloor \frac{\mathcal{O}-1}{2} \rfloor - 1);$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < \lfloor \frac{\mathcal{O}-1}{2} \rfloor + 1 - (\lfloor \frac{\mathcal{O}-1}{2} \rfloor - 1) < 2;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2.$$

Thus S is an 2-SuperHyperDefensive SuperHyperConnectivities.
(ii). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is a SuperHyperComplete. Then

$$\forall t \in V\setminus S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| > \lfloor\frac{\mathcal{O}-1}{2}\rfloor + 1 - (\lfloor\frac{\mathcal{O}-1}{2}\rfloor - 1);$$
$$\forall t \in V\setminus S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| > \lfloor\frac{\mathcal{O}-1}{2}\rfloor + 1 - (\lfloor\frac{\mathcal{O}-1}{2}\rfloor - 1) > 2;$$
$$\forall t \in V\setminus S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| > 2.$$

Thus S is a dual 2-SuperHyperDefensive SuperHyperConnectivities.
(iii). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is a SuperHyperComplete. Then

$$\forall t \in S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| < \mathcal{O}-1-0;$$
$$\forall t \in S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| < \mathcal{O}-1-0 = \mathcal{O}-1;$$
$$\forall t \in S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| < \mathcal{O}-1.$$

Thus S is an $(\mathcal{O}-1)$-SuperHyperDefensive SuperHyperConnectivities.
(iv). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is a SuperHyperComplete. Then

$$\forall t \in V\setminus S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| > \mathcal{O}-1-0;$$
$$\forall t \in V\setminus S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| > \mathcal{O}-1-0 = \mathcal{O}-1;$$
$$\forall t \in V\setminus S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| > \mathcal{O}-1.$$

Thus S is a dual $(\mathcal{O}-1)$-SuperHyperDefensive SuperHyperConnectivities. ∎

Proposition 10.0.53. *Let $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is SuperHyperConnectivities. Then following statements hold;*

- *(i)* $\forall a \in S,\ |N_s(a)\cap S| < 2$ *if $ESHG:(V,E))$ is an 2-SuperHyperDefensive SuperHyperConnectivities;*
- *(ii)* $\forall a \in V\setminus S,\ |N_s(a)\cap S| > 2$ *if $ESHG:(V,E)$ is a dual 2-SuperHyperDefensive SuperHyperConnectivities;*
- *(iii)* $\forall a \in S,\ |N_s(a)\cap V\setminus S| = 0$ *if $ESHG:(V,E)$ is an 2-SuperHyperDefensive SuperHyperConnectivities;*
- *(iv)* $\forall a \in V\setminus S,\ |N_s(a)\cap V\setminus S| = 0$ *if $ESHG:(V,E)$ is a dual 2-SuperHyperDefensive SuperHyperConnectivities.*

Proof. (i). Suppose $ESHG:(V,E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and S is an 2-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t \in S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| < 2;$$
$$\forall t \in S,\ |N_s(t)\cap S| - |N_s(t)\cap (V\setminus S)| < 2 = 2-0;$$

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2;$$
$$\forall t \in S,\ |N_s(t) \cap S| < 2,\ |N_s(t) \cap (V \setminus S)| = 0.$$

(ii). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and S is a dual 2-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2 = 2 - 0;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| > 2,\ |N_s(t) \cap (V \setminus S) = 0.$$

(iii). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and S is an 2-SuperHyperDefensive SuperHyperConnectivities.

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2 = 2 - 0;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2 - 0;$$
$$\forall t \in S,\ |N_s(t) \cap S| < 2,\ |N_s(t) \cap (V \setminus S)| = 0.$$

(iv). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph and S is a dual r-SuperHyperDefensive SuperHyperConnectivities. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2 = 2 - 0;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2 - 0;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| > 2,\ |N_s(t) \cap (V \setminus S)| = 0.$$

■

Proposition 10.0.54. *Let $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is SuperHyperConnectivities. Then following statements hold;*

(i) if $\forall a \in S,\ |N_s(a) \cap S| < 2$, then $ESHG : (V, E)$ is an 2-SuperHyperDefensive SuperHyperConnectivities;

(ii) if $\forall a \in V \setminus S,\ |N_s(a) \cap S| > 2$, then $ESHG : (V, E)$ is a dual 2-SuperHyperDefensive SuperHyperConnectivities;

(iii) if $\forall a \in S,\ |N_s(a) \cap V \setminus S| = 0$, then $ESHG : (V, E)$ is an 2-SuperHyperDefensive SuperHyperConnectivities;

(iv) if $\forall a \in V \setminus S,\ |N_s(a) \cap V \setminus S| = 0$, then $ESHG : (V, E)$ is a dual 2-SuperHyperDefensive SuperHyperConnectivities.

Proof. (i). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is SuperHyperConnectivities. Then

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2 - 0;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2 - 0 = 2;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2.$$

Thus S is an 2-SuperHyperDefensive SuperHyperConnectivities.
(ii). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is SuperHyperConnectivities. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2 - 0;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2 - 0 = 2;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2.$$

Thus S is a dual 2-SuperHyperDefensive SuperHyperConnectivities.
(iii). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is SuperHyperConnectivities. Then

$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2 - 0;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2 - 0 = 2;$$
$$\forall t \in S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| < 2.$$

Thus S is an 2-SuperHyperDefensive SuperHyperConnectivities.
(iv). Suppose $ESHG : (V, E)$ is a[an] [r-]SuperHyperUniform-strong-Neutrosophic SuperHyperGraph which is SuperHyperConnectivities. Then

$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2 - 0;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2 - 0 = 2;$$
$$\forall t \in V \setminus S,\ |N_s(t) \cap S| - |N_s(t) \cap (V \setminus S)| > 2.$$

Thus S is a dual 2-SuperHyperDefensive SuperHyperConnectivities. ■

CHAPTER 11

Extreme Applications in Cancer's Extreme Recognition

The cancer is the Extreme disease but the Extreme model is going to figure out what's going on this Extreme phenomenon. The special Extreme case of this Extreme disease is considered and as the consequences of the model, some parameters are used. The cells are under attack of this disease but the moves of the cancer in the special region are the matter of mind. The Extreme recognition of the cancer could help to find some Extreme treatments for this Extreme disease.
In the following, some Extreme steps are Extreme devised on this disease.

Step 1. (Extreme Definition) The Extreme recognition of the cancer in the long-term Extreme function.

Step 2. (Extreme Issue) The specific region has been assigned by the Extreme model [it's called Neutrosophic SuperHyperGraph] and the long Extreme cycle of the move from the cancer is identified by this research. Sometimes the move of the cancer hasn't be easily identified since there are some determinacy, indeterminacy and neutrality about the moves and the effects of the cancer on that region; this event leads us to choose another model [it's said to be Neutrosophic SuperHyperGraph] to have convenient perception on what's happened and what's done.

Step 3. (Extreme Model) There are some specific Extreme models, which are well-known and they've got the names, and some general Extreme models. The moves and the Extreme traces of the cancer on the complex tracks and between complicated groups of cells could be fantasized by an Extreme SuperHyperPath(-/SuperHyperConnectivities, SuperHyperStar, SuperHyperBipartite, SuperHyperMultipartite, SuperHyperWheel). The aim is to find either the Extreme SuperHyperConnectivities or the Extreme SuperHyperConnectivities in those Extreme Extreme SuperHyperModels.

CHAPTER 12

Case 1: The Initial Extreme Steps Toward Extreme SuperHyperBipartite as Extreme SuperHyperModel

Step 4. (Extreme Solution) In the Extreme Figure (12.1), the Extreme SuperHyperBipartite is Extreme highlighted and Extreme featured.

By using the Extreme Figure (12.1) and the Table (12.1), the Extreme SuperHyperBipartite is obtained.

The obtained Extreme SuperHyperSet, by the Extreme Algorithm in previous Extreme result,

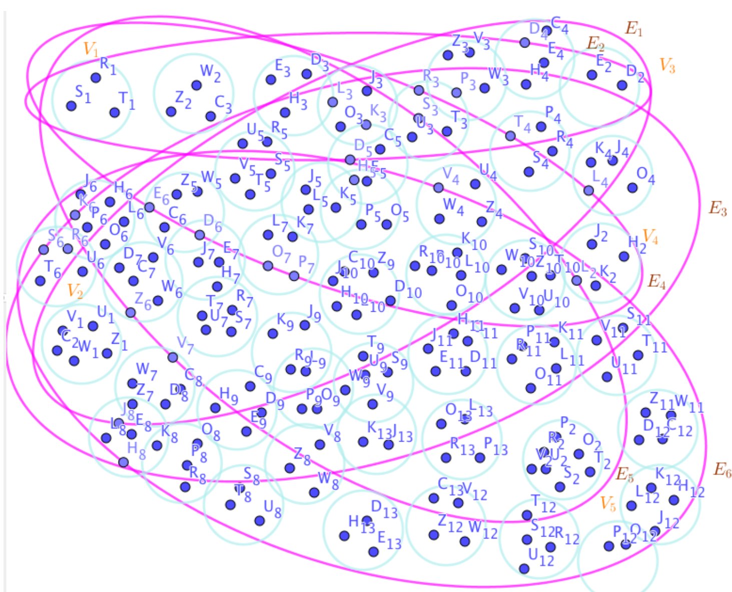


Figure 12.1: an Extreme SuperHyperBipartite Associated to the Notions of Extreme SuperHyper-Connectivities

Table 12.1: The Values of Vertices, SuperVertices, Edges, HyperEdges, and SuperHyperEdges Belong to The Extreme SuperHyperBipartite

The Values of The Vertices	The Number of Position in Alphabet
The Values of The SuperVertices	The maximum Values of Its Vertices
The Values of The Edges	The maximum Values of Its Vertices
The Values of The HyperEdges	The maximum Values of Its Vertices
The Values of The SuperHyperEdges	The maximum Values of Its Endpoints

of the Extreme SuperHyperVertices of the connected Extreme SuperHyperBipartite $ESHB : (V, E)$, in the Extreme SuperHyperModel (12.1), is the Extreme SuperHyperConnectivities.

CHAPTER 13

Case 2: The Increasing Extreme Steps Toward Extreme SuperHyperMultipartite as Extreme SuperHyperModel

Step 4. (Extreme Solution) In the Extreme Figure (13.1), the Extreme SuperHyperMultipartite is Extreme highlighted and Extreme featured.

By using the Extreme Figure (13.1) and the Table (13.1), the Extreme SuperHyperMultipartite is obtained.

The obtained Extreme SuperHyperSet, by the Extreme Algorithm in previous result, of the Extreme SuperHyperVertices of the connected Extreme SuperHyperMultipartite $ESHM : (V, E)$, in the Extreme SuperHyperModel (13.1), is the Extreme SuperHyperConnectivities.

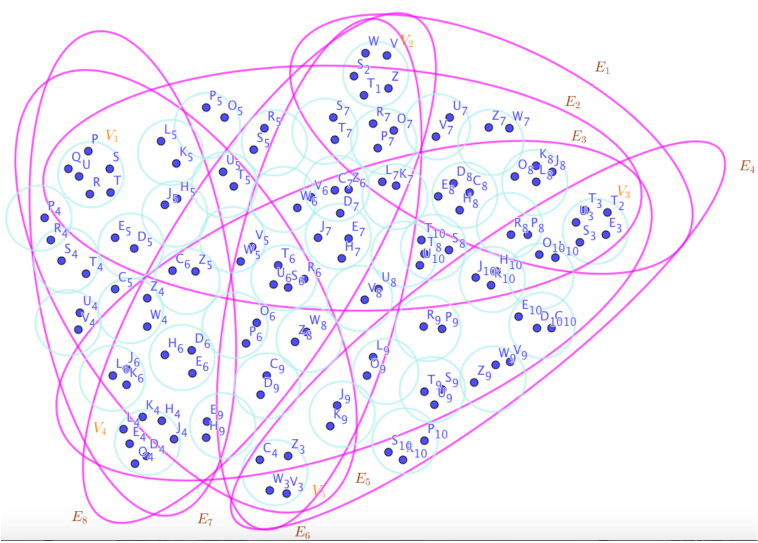


Figure 13.1: an Extreme SuperHyperMultipartite Associated to the Notions of Extreme SuperHyperConnectivities

Table 13.1: The Values of Vertices, SuperVertices, Edges, HyperEdges, and SuperHyperEdges Belong to The Extreme SuperHyperMultipartite

The Values of The Vertices	The Number of Position in Alphabet
The Values of The SuperVertices	The maximum Values of Its Vertices
The Values of The Edges	The maximum Values of Its Vertices
The Values of The HyperEdges	The maximum Values of Its Vertices
The Values of The SuperHyperEdges	The maximum Values of Its Endpoints

CHAPTER 14

Open Problems

In what follows, some "problems" and some "questions" are proposed.
The SuperHyperConnectivities and the Extreme SuperHyperConnectivities are defined on a real-world application, titled "Cancer's Recognitions".

Question 14.0.1. *Which the else SuperHyperModels could be defined based on Cancer's recognitions?*

Question 14.0.2. *Are there some SuperHyperNotions related to SuperHyperConnectivities and the Extreme SuperHyperConnectivities?*

Question 14.0.3. *Are there some Algorithms to be defined on the SuperHyperModels to compute them?*

Question 14.0.4. *Which the SuperHyperNotions are related to beyond the SuperHyperConnectivities and the Extreme SuperHyperConnectivities?*

Problem 14.0.5. *The SuperHyperConnectivities and the Extreme SuperHyperConnectivities do a SuperHyperModel for the Cancer's recognitions and they're based on SuperHyperConnectivities, are there else?*

Problem 14.0.6. *Which the fundamental SuperHyperNumbers are related to these SuperHyperNumbers types-results?*

Problem 14.0.7. *What's the independent research based on Cancer's recognitions concerning the multiple types of SuperHyperNotions?*

CHAPTER 15

Conclusion and Closing Remarks

In this section, concluding remarks and closing remarks are represented. The drawbacks of this research are illustrated. Some benefits and some advantages of this research are highlighted.
This research uses some approaches to make Neutrosophic SuperHyperGraphs more understandable. In this endeavor, two SuperHyperNotions are defined on the SuperHyperConnectivities. For that sake in the second definition, the main definition of the Neutrosophic SuperHyperGraph is redefined on the position of the alphabets. Based on the new definition for the Neutrosophic SuperHyperGraph, the new SuperHyperNotion, Extreme SuperHyperConnectivities, finds the convenient background to implement some results based on that. Some SuperHyperClasses and some Extreme SuperHyperClasses are the cases of this research on the modeling of the regions where are under the attacks of the cancer to recognize this disease as it's mentioned on the title "Cancer's Recognitions". To formalize the instances on the SuperHyperNotion, SuperHyperConnectivities, the new SuperHyperClasses and SuperHyperClasses, are introduced. Some general results are gathered in the section on the SuperHyperConnectivities and the Extreme SuperHyperConnectivities. The clarifications, instances and literature reviews have taken the whole way through. In this research, the literature reviews have fulfilled the lines containing the notions and the results. The SuperHyperGraph and Neutrosophic SuperHyperGraph are the SuperHyperModels on the "Cancer's Recognitions" and both bases are the background of this research. Sometimes the cancer has been happened on the region, full of cells, groups of cells and embedded styles. In this segment, the SuperHyperModel proposes some SuperHyperNotions based on the connectivities of the moves of the cancer in the longest and strongest styles with the formation of the design and the architecture are formally called " SuperHyperConnectivities" in the themes of jargons and buzzwords. The prefix "SuperHyper" refers to the theme of the embedded styles to figure out the background for the SuperHyperNotions. In the Table (15.1), some limitations and advantages of this research are pointed out.

Table 15.1: A Brief Overview about Advantages and Limitations of this Research

Advantages	Limitations
1. Redefining Neutrosophic SuperHyperGraph	1. General Results
2. SuperHyperConnectivities	
3. Extreme SuperHyperConnectivities	2. Other SuperHyperNumbers
4. Modeling of Cancer's Recognitions	
5. SuperHyperClasses	3. SuperHyperFamilies

Bibliography

[1] Henry Garrett, "*Properties of SuperHyperGraph and Neutrosophic SuperHyperGraph*", Neutrosophic Sets and Systems 49 (2022) 531-561 (doi: 10.5281/zenodo.6456413). (http://fs.unm.edu/NSS/NeutrosophicSuperHyperGraph34.pdf). (https://digitalrepository.unm.edu/nss_journal/vol49/iss1/34).

[2] Henry Garrett, "*Neutrosophic Co-degree and Neutrosophic Degree alongside Chromatic Numbers in the Setting of Some Classes Related to Neutrosophic Hypergraphs*", J Curr Trends Comp Sci Res 1(1) (2022) 06-14.

[3] Henry Garrett, "*Super Hyper Dominating and Super Hyper Resolving on Neutrosophic Super Hyper Graphs and Their Directions in Game Theory and Neutrosophic Super Hyper Classes*", J Math Techniques Comput Math 1(3) (2022) 242-263.

[4] Garrett, Henry. "*0039 | Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph.*" CERN European Organization for Nuclear Research - Zenodo, Nov. 2022. CERN European Organization for Nuclear Research, https://doi.org/10.5281/zenodo.6319942. https://oa.mg/work/10.5281/zenodo.6319942

[5] Garrett, Henry. "*0049 | (Failed)1-Zero-Forcing Number in Neutrosophic Graphs.*" CERN European Organization for Nuclear Research - Zenodo, Feb. 2022. CERN European Organization for Nuclear Research, https://doi.org/10.13140/rg.2.2.35241.26724. https://oa.mg/work/10.13140/rg.2.2.35241.26724

[6] Henry Garrett, "*Extreme SuperHyperClique as the Firm Scheme of Confrontation under Cancer's Recognition as the Model in The Setting of (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010308 (doi: 10.20944/preprints202301.0308.v1).

[7] Henry Garrett, "*Uncertainty On The Act And Effect Of Cancer Alongside The Foggy Positions Of Cells Toward Neutrosophic Failed SuperHyperClique inside Neutrosophic SuperHyperGraphs Titled Cancer's Recognition*", Preprints 2023, 2023010282 (doi: 10.20944/preprints202301.0282.v1).

[8] Henry Garrett, "*Neutrosophic Version Of Separates Groups Of Cells In Cancer's Recognition On Neutrosophic SuperHyperGraphs*", Preprints 2023, 2023010267 (doi: 10.20944/preprints202301.0267.v1).

[9] Henry Garrett, "*The Shift Paradigm To Classify Separately The Cells and Affected Cells Toward The Totality Under Cancer's Recognition By New Multiple Definitions On the Sets Polynomials Alongside Numbers In The (Neutrosophic) SuperHyperMatching Theory Based on SuperHyperGraph and Neutrosophic SuperHyperGraph*", Preprints 2023, 2023010265 (doi: 10.20944/preprints202301.0265.v1).

[10] Henry Garrett, "*Breaking the Continuity and Uniformity of Cancer In The Worst Case of Full Connections With Extreme Failed SuperHyperClique In Cancer's Recognition Applied in (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010262,(doi: 10.20944/preprints202301.0262.v1).

[11] Henry Garrett, "*Neutrosophic Failed SuperHyperStable as the Survivors on the Cancer's Neutrosophic Recognition Based on Uncertainty to All Modes in Neutrosophic SuperHyperGraphs*", Preprints 2023, 2023010240 (doi: 10.20944/preprints202301.0240.v1).

[12] Henry Garrett, "*Extremism of the Attacked Body Under the Cancer's Circumstances Where Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010224, (doi: 10.20944/preprints202301.0224.v1).

[13] Henry Garrett, "*(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010105 (doi: 10.20944/preprints202301.0105.v1).

[14] Henry Garrett, "*Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints*", Preprints 2023, 2023010088 (doi: 10.20944/preprints202301.0088.v1).

[15] Henry Garrett, "*Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond*", Preprints 2023, 2023010044

[16] Henry Garrett, "*(Neutrosophic) SuperHyperStable on Cancer's Recognition by Well- SuperHyperModelled (Neutrosophic) SuperHyperGraphs*", Preprints 2023, 2023010043 (doi: 10.20944/preprints202301.0043.v1).

[17] Henry Garrett, *"Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs"*, Preprints 2023, 2023010105 (doi: 10.20944/preprints202301.0105.v1).

[18] Henry Garrett, *"Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints"*, Preprints 2023, 2023010088 (doi: 10.20944/preprints202301.0088.v1).

[19] Henry Garrett, *"(Neutrosophic) SuperHyperModeling of Cancer's Recognitions Featuring (Neutrosophic) SuperHyperDefensive SuperHyperAlliances"*, Preprints 2022, 2022120549 (doi: 10.20944/preprints202212.0549.v1).

[20] Henry Garrett, "*(Neutrosophic) SuperHyperAlliances With SuperHyperDefensive and SuperHyperOffensive Type-SuperHyperSet On (Neutrosophic) SuperHyperGraph With (Neutrosophic) SuperHyperModeling of Cancer's Recognitions And Related (Neutrosophic) SuperHyperClasses*", Preprints 2022, 2022120540 (doi: 10.20944/preprints202212.0540.v1).

[21] Henry Garrett, "*SuperHyperGirth on SuperHyperGraph and Neutrosophic SuperHyperGraph With SuperHyperModeling of Cancer's Recognitions*", Preprints 2022, 2022120500 (doi: 10.20944/preprints202212.0500.v1).

[22] Henry Garrett, "*Some SuperHyperDegrees and Co-SuperHyperDegrees on Neutrosophic SuperHyperGraphs and SuperHyperGraphs Alongside Applications in Cancer's Treatments*", Preprints 2022, 2022120324 (doi: 10.20944/preprints202212.0324.v1).

[23] Henry Garrett, "*SuperHyperDominating and SuperHyperResolving on Neutrosophic SuperHyperGraphs And Their Directions in Game Theory and Neutrosophic SuperHyperClasses*", Preprints 2022, 2022110576 (doi: 10.20944/preprints202211.0576.v1).

[24] Henry Garrett,"*SuperHyperMatching By (R-)Definitions And Polynomials To Monitor Cancer's Recognition In Neutrosophic SuperHyperGraphs*", ResearchGate 2023,(doi: 10.13140/RG.2.2.35061.65767).

[25] Henry Garrett,"*The Focus on The Partitions Obtained By Parallel Moves In The Cancer's Extreme Recognition With Different Types of Extreme SuperHyperMatching Set and Polynomial on (Neutrosophic) SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.18494.15680).

[26] Henry Garrett,"*Extreme Failed SuperHyperClique Decides the Failures on the Cancer's Recognition in the Perfect Connections of Cancer's Attacks By SuperHyperModels Named (Neutrosophic) SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.32530.73922).

[27] Henry Garrett,"*Indeterminacy On The All Possible Connections of Cells In Front of Cancer's Attacks In The Terms of Neutrosophic Failed SuperHyperClique on Cancer's Recognition called Neutrosophic SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.15897.70243).

[28] Henry Garrett,"*Perfect Directions Toward Idealism in Cancer's Neutrosophic Recognition Forwarding Neutrosophic SuperHyperClique on Neutrosophic SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.30092.80004).

[29] Henry Garrett,"*Demonstrating Complete Connections in Every Embedded Regions and Sub-Regions in the Terms of Cancer's Recognition and (Neutrosophic) SuperHyperGraphs With (Neutrosophic) SuperHyperClique*", ResearchGate 2023, (doi: 10.13140/RG.2.2.23172.19849).

[30] Henry Garrett,"*Different Neutrosophic Types of Neutrosophic Regions titled neutrosophic Failed SuperHyperStable in Cancer's Neutrosophic Recognition modeled in the Form of Neutrosophic SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.17385.36968).

[31] Henry Garrett, "*Using the Tool As (Neutrosophic) Failed SuperHyperStable To SuperHyperModel Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.28945.92007).

[32] Henry Garrett, "*Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints*", ResearchGate 2023, (doi: 10.13140/RG.2.2.11447.80803).

[33] Henry Garrett, "*(Neutrosophic) SuperHyperStable on Cancer's Recognition by Well-SuperHyperModelled (Neutrosophic) SuperHyperGraphs*", ResearchGate 2023, (doi: 10.13140/RG.2.2.35774.77123).

[34] Henry Garrett, "*Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond*", ResearchGate 2022, (doi: 10.13140/RG.2.2.36141.77287).

[35] Henry Garrett, "*(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs*", ResearchGate 2022, (doi: 10.13140/RG.2.2.29430.88642).

[36] Henry Garrett, "*Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs*", ResearchGate 2022, (doi: 10.13140/RG.2.2.11369.16487).

[37] Henry Garrett, *"Basic Neutrosophic Notions Concerning SuperHyperDominating and Neutrosophic SuperHyperResolving in SuperHyperGraph"*, ResearchGate 2022 (doi: 10.13140/RG.2.2.29173.86244).

[38] Henry Garrett, "*Initial Material of Neutrosophic Preliminaries to Study Some Neutrosophic Notions Based on Neutrosophic SuperHyperEdge (NSHE) in Neutrosophic SuperHyperGraph (NSHG)*", ResearchGate 2022 (doi: 10.13140/RG.2.2.25385.88160).

[39] Henry Garrett, (2022). "*Beyond Neutrosophic Graphs*", Ohio: E-publishing: Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United States. ISBN: 979-1-59973-725-6 (http://fs.unm.edu/BeyondNeutrosophicGraphs.pdf).

[40] Henry Garrett, (2022). "*Neutrosophic Duality*", Florida: GLOBAL KNOWLEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. ISBN: 978-1-59973-743-0 (http://fs.unm.edu/NeutrosophicDuality.pdf).

CHAPTER 16

"SuperHyperGraph-Based Books": | Featured Tweets

"SuperHyperGraph-Based Books": | Featured Tweets

Project

ResearchGate

Neutrosophic SuperHyperGraphs and SuperHyperGraphs

Henry Garrett

Goal: The aim of this project is to contribute some research articles and some research books in that subject. Finding tools and notions to define in this structure to make this structure more understandable. Clarifications are presented in oversimplified ways. There are well-defined efforts to get more sensible results.

Sometimes, I post one part of book at my website. After that, I put that link in this project. Some research articles and some research books are excerpt from these posts.

Instance updates are on my accounts, simultaneously [Website, Scribd, Twitter, Amazon, Academia, LinkedIn, Twitter, ResearchGate.].

I've listed my accounts below.
-My website [Covering all my contributions containing articles and books as free access to download with PDF extension and more]: https://drhenrygarrett.wordpress.com

-Amazon [Some of my all books, here]: https://www.amzn.com/author/drhenrygarrett

-Twitter: @DrHenryGarrett (www.twitter.com/DrHenryGarrett)

-ResearchGate: https://www.researchgate.net/profile/Henry-Garrett-2

-Academia: https://independent.academia.edu/drhenrygarrett/

-Scribd: https://www.scribd.com/user/596815491/Henry-Garrett

-Scholar: https://scholar.google.com/citations?hl=en&user=SUjFCmcAAAAJ&view_op=list_works&sortby=pubdate

-LinkedIn: https://www.linkedin.com/in/drhenrygarrett/

Figure 16.1: "SuperHyperGraph-Based Books": | Featured Tweets

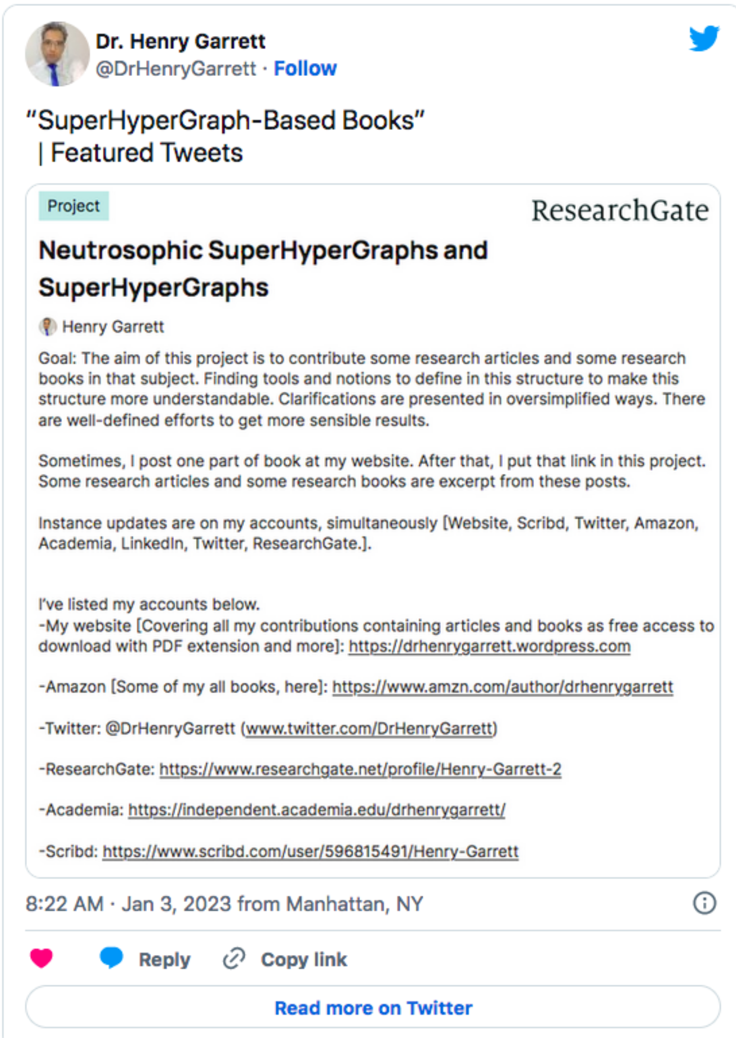


Figure 16.2: "SuperHyperGraph-Based Books": | Featured Tweets

Figure 16.3: "SuperHyperGraph-Based Books": | Featured Tweets #69

Figure 16.4: "SuperHyperGraph-Based Books": | Featured Tweets #69

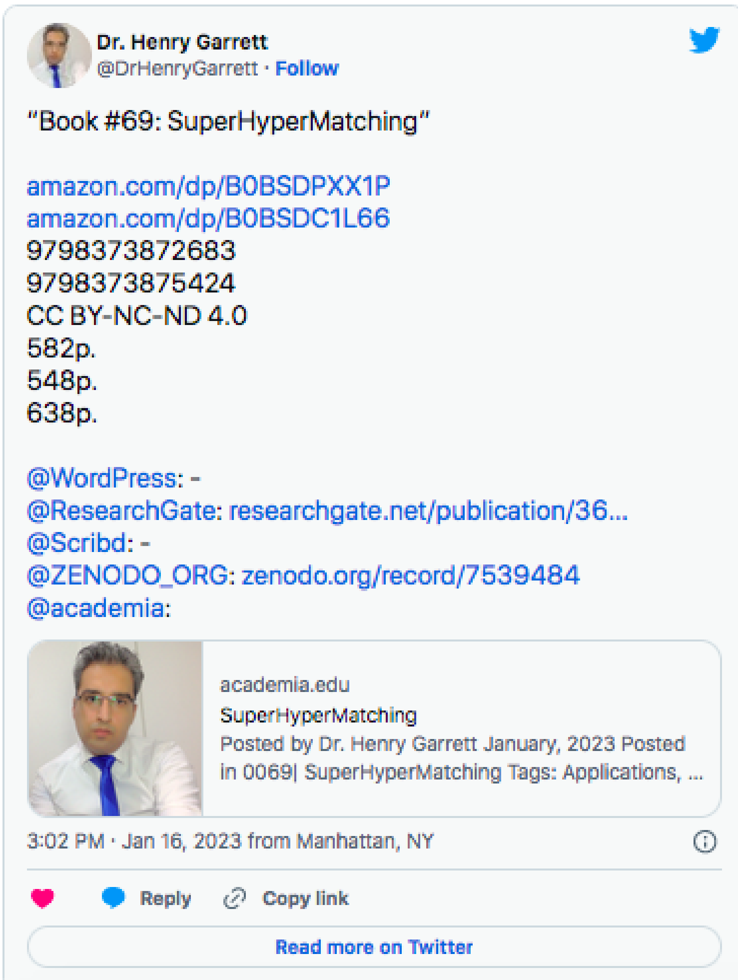
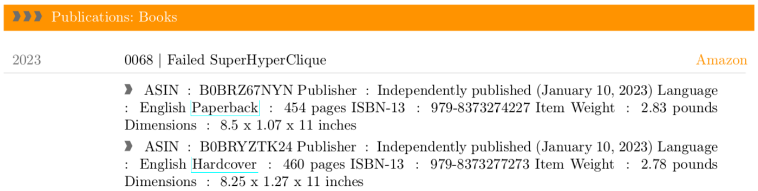


Figure 16.5: "SuperHyperGraph-Based Books": | Featured Tweets #69

Figure 16.6: "SuperHyperGraph-Based Books": | Featured Tweets #68

Figure 16.7: "SuperHyperGraph-Based Books": | Featured Tweets #68

Figure 16.8: "SuperHyperGraph-Based Books": | Featured Tweets #68



Publications: Books

2023 0068 | Failed SuperHyperClique Amazon

- ASIN : B0BRZ67NYN Publisher : Independently published (January 10, 2023) Language : English Paperback : 454 pages ISBN-13 : 979-8373274227 Item Weight : 2.83 pounds Dimensions : 8.5 x 1.07 x 11 inches
- ASIN : B0BRYZTK24 Publisher : Independently published (January 10, 2023) Language : English Hardcover : 460 pages ISBN-13 : 979-8373277273 Item Weight : 2.78 pounds Dimensions : 8.25 x 1.27 x 11 inches

Figure 16.9: "SuperHyperGraph-Based Books": | Featured Tweets #68

Figure 16.10: "SuperHyperGraph-Based Books": | Featured Tweets #67

Figure 16.11: "SuperHyperGraph-Based Books": | Featured Tweets #67

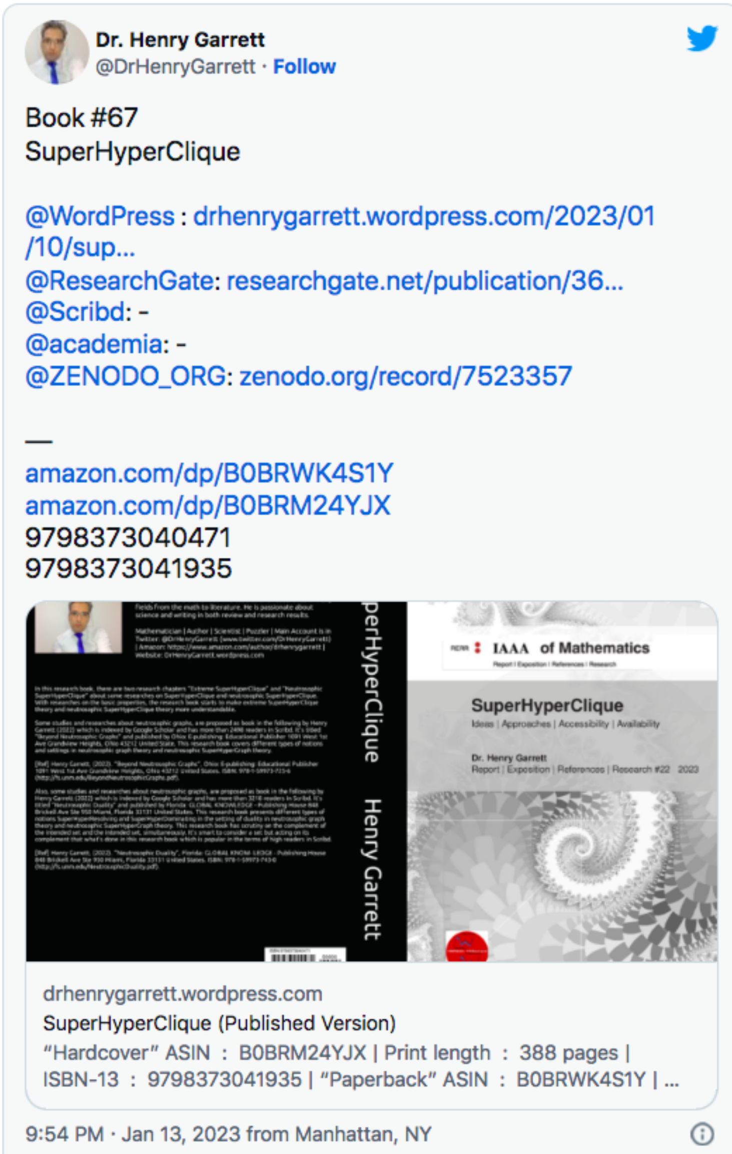


Figure 16.12: "SuperHyperGraph-Based Books": | Featured Tweets #67

Publications: Books

2023 0067 | SuperHyperClique Amazon

- ASIN : B0BRWK4S1Y Publisher : Independently published (January 8, 2023) Language : English Paperback : 376 pages ISBN-13 : 979-8373040471 Item Weight : 2.36 pounds Dimensions : 8.5 x 0.89 x 11 inches
- ASIN : B0BRM24YJX Publisher : Independently published (January 8, 2023) Language : English Hardcover : 388 pages ISBN-13 : 979-8373041935 Item Weight : 2.36 pounds Dimensions : 8.25 x 1.1 x 11 inches

Figure 16.13: “SuperHyperGraph-Based Books”: | Featured Tweets #67

Figure 16.14: “SuperHyperGraph-Based Books”: | Featured Tweets #66

Figure 16.15: "SuperHyperGraph-Based Books": | Featured Tweets #66

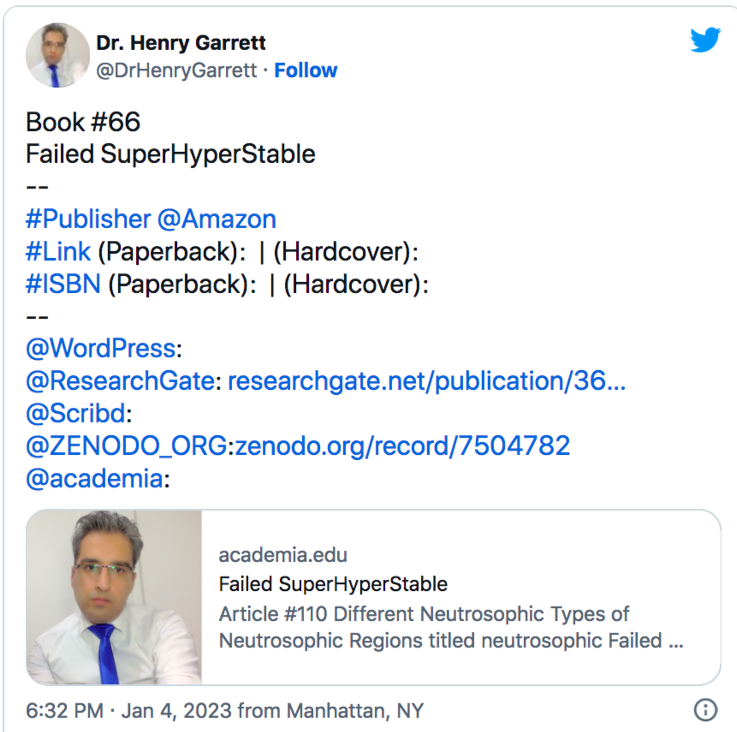


Figure 16.16: “SuperHyperGraph-Based Books”: | Featured Tweets #66

Figure 16.17: "SuperHyperGraph-Based Books": | Featured Tweets #66

Publications: Books

2023 0066 | Failed SuperHyperStable Amazon

- ASIN : B0BRNG7DC8 Publisher : Independently published (January 4, 2023) Language : English Paperback : 304 pages ISBN-13 : 979-8372597976 Item Weight : 1.93 pounds Dimensions : 8.5 x 0.72 x 11 inches
- ASIN : B0BRLVN39L Publisher : Independently published (January 4, 2023) Language : English Hardcover : 306 pages ISBN-13 : 979-8372599765 Item Weight : 1.89 pounds Dimensions : 8.25 x 0.91 x 11 inches

Figure 16.18: "SuperHyperGraph-Based Books": | Featured Tweets #66

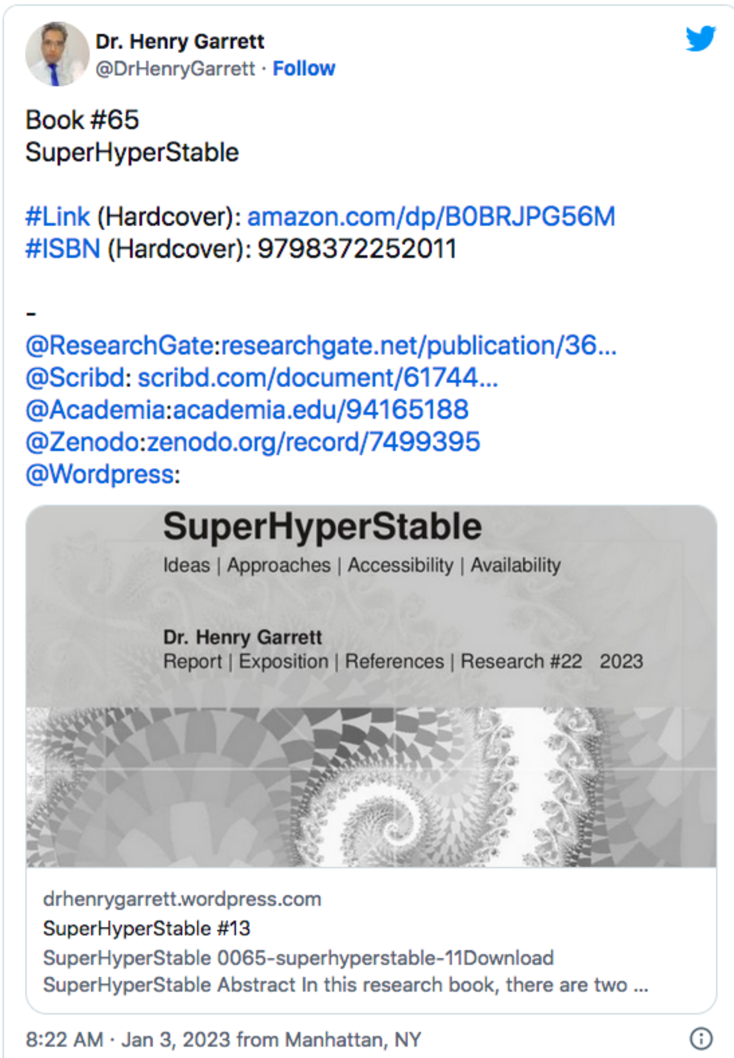


Figure 16.19: “SuperHyperGraph-Based Books”: | Featured Tweets #65

Figure 16.20: "SuperHyperGraph-Based Books": | Featured Tweets #65

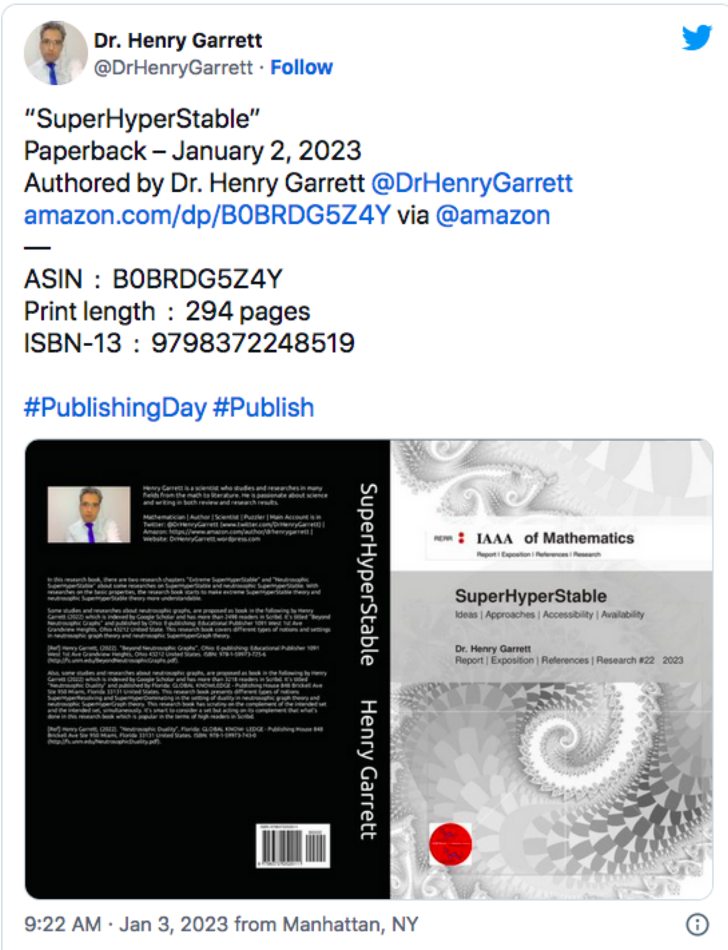


Figure 16.21: "SuperHyperGraph-Based Books": | Featured Tweets #65

Figure 16.22: "SuperHyperGraph-Based Books": | Featured Tweets #65

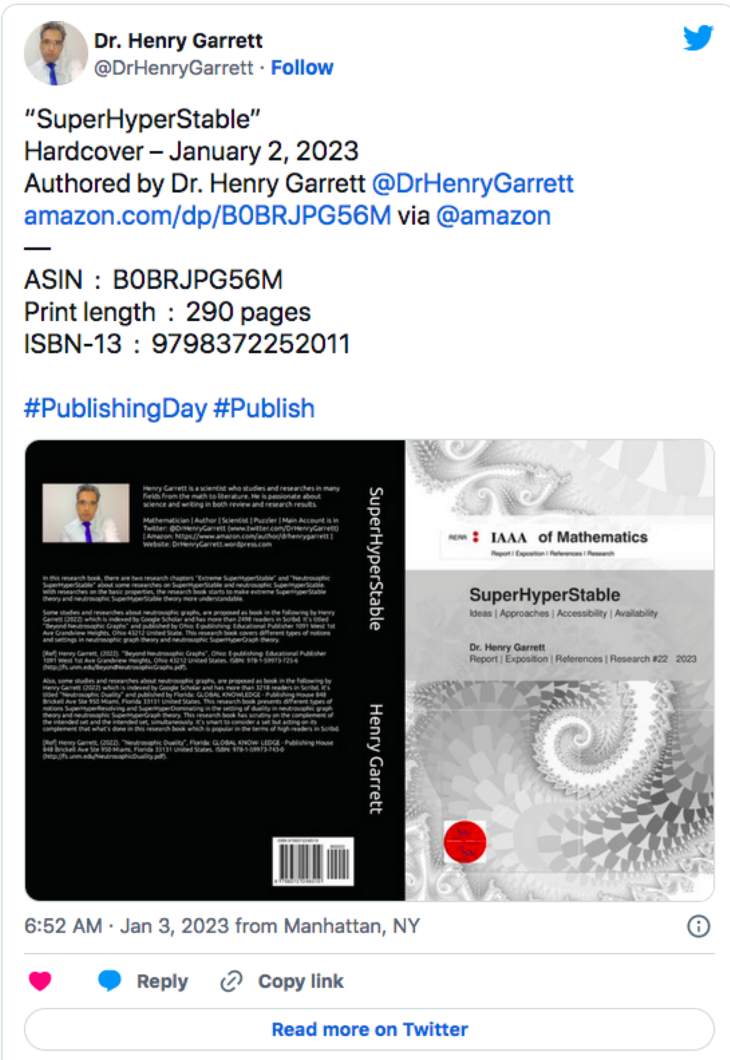


Figure 16.23: “SuperHyperGraph-Based Books”: | Featured Tweets #65

Figure 16.24: "SuperHyperGraph-Based Books": | Featured Tweets #65

Figure 16.25: "SuperHyperGraph-Based Books": | Featured Tweets #64

Figure 16.26: “SuperHyperGraph-Based Books”: | Featured Tweets #63

Figure 16.27: “SuperHyperGraph-Based Books”: | Featured Tweets #62

Figure 16.28: "SuperHyperGraph-Based Books": | Featured Tweets #61

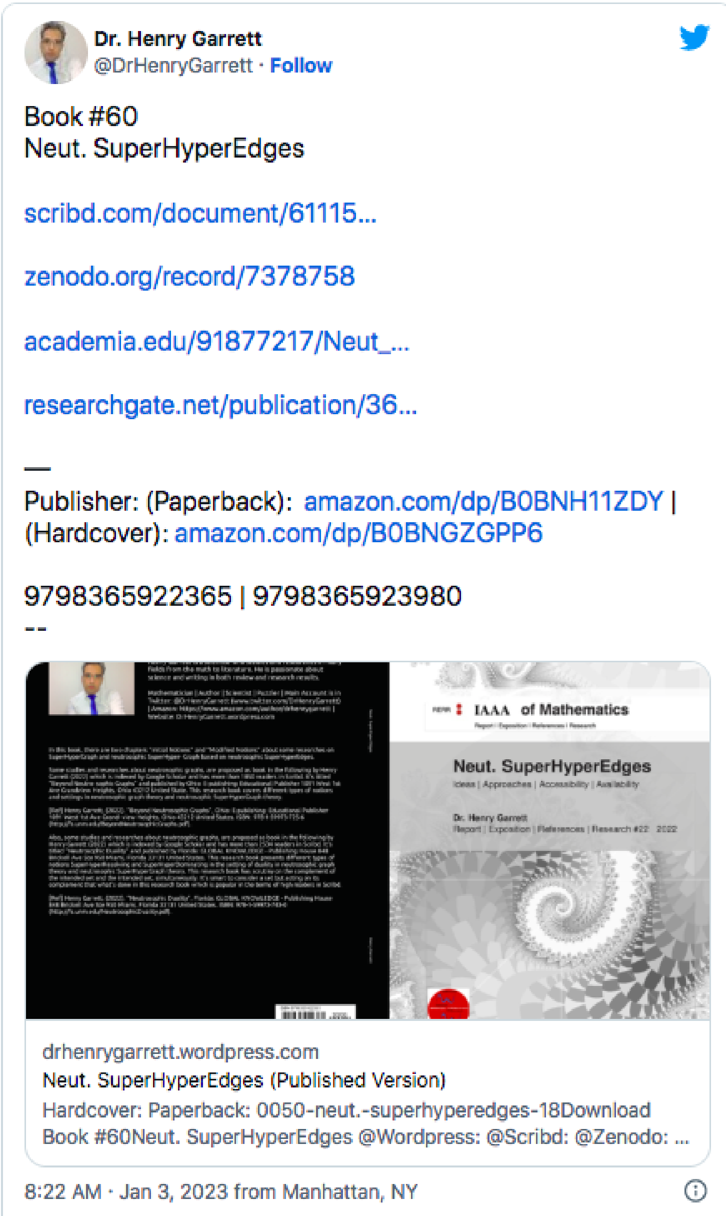


Figure 16.29: "SuperHyperGraph-Based Books": | Featured Tweets #60

CHAPTER 17

CV

Henry Garrett · Independent Researcher · Department of Mathematics · DrHenryGarrett@gmail.com · Manhattan, NY, USA

Henry Garrett | CV

- **Status:** Known As Henry Garrett With Highly Productive Style.
- **Fields:** Combinatorics, Algebraic Structures, Algebraic Hyperstructures, Fuzzy Logic
- **Prefers:** Graph Theory, Domination, Metric Dimension, Neutrosophic Graph Theory, Neutrosophic Domination, Lattice Theory, Groups and Hypergroups
- **Activities:** Traveling, Painting, Writing, Reading books and Papers

Professional Experiences

2017 - Present — Continuous Member — AMS

- I tried to show them that Science is not only interesting, it's beautiful and exciting.
- Participating in the academic space of the largest mathematical Society gave me valuable experiences. The use of Bulletin and Notice of the American Mathematical Society is another benefit of this presence.

2017 - 2019 — Continuous Member — EMS

- The use Newsletter of the European Mathematical Society is benefit of this membership.
- I am interested in giving a small, though small, effect on math epidemic progress

Awards and Achievements

Sep 2022 — Award: Selected as an Editorial Board Member to JMTCM — JMTCM

- Award: Selected as an Editorial Board Member to Journal of Mathematical Techniques and Computational Mathematics(JMTCM)
- Journal of Mathematical Techniques and Computational Mathematics(JMTCM)

Jun 2022 — Award: Selected as an Editorial Board Member to JCTCSR — JCTCSR

- Award: Selected as an Editorial Board Member to Journal of Current Trends in Computer Science Research(JCTCSR)
- Journal of Current Trends in Computer Science Research(JCTCSR)

Jan 23, 2022 — Award: Diploma By Neutrosophic Science International Association — Neutrosophic Science International Association

- Award: Distinguished Achievements
- Honorary Memebrship

Journal Referee

Sep 2022 — Editorial Board Member to JMTCM — JMTCM

- Editorial Board Member to Journal of Mathematical Techniques and Computational Mathematics(JMTCM)
- Journal of Mathematical Techniques and Computational Mathematics(JMTCM)

Jun 2022 — Editorial Board Member to JCTCSR — JCTCSR

- Editorial Board Member to Journal of Current Trends in Computer Science Research(JCTCSR)
- Journal of Current Trends in Computer Science Research(JCTCSR)

Publications: Articles

2023 | 0126 | Extreme SuperHyperClique as the Firm Scheme of Confrontation under Cancer's Recognition as the Model in The Setting of (Neutrosophic) SuperHyperGraphs | Manuscript

- Henry Garrett,"Extreme SuperHyperClique as the Firm Scheme of Confrontation under Cancer's Recognition as the Model in The Setting of (Neutrosophic) SuperHyperGraphs", Preprints 2023, 2023010308 (doi: 10.20944/preprints202301.0308.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0125 | Uncertainty On The Act And Effect Of Cancer Alongside The Foggy Positions Of Cells Toward Neutrosophic Failed SuperHyperClique inside Neutrosophic SuperHyperGraphs Titled Cancer's Recognition | Manuscript

- Henry Garrett,"Uncertainty On The Act And Effect Of Cancer Alongside The Foggy Positions Of Cells Toward Neutrosophic Failed SuperHyperClique inside Neutrosophic SuperHyperGraphs Titled Cancer's Recognition", Preprints 2023, 2023010282 (doi: 10.20944/preprints202301.0282.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0124 | Neutrosophic Version Of Separates Groups Of Cells In Cancer's Recognition On Neutrosophic SuperHyperGraphs | Manuscript

- Henry Garrett,"Neutrosophic Version Of Separates Groups Of Cells In Cancer's Recognition On Neutrosophic SuperHyperGraphs", Preprints 2023, 2023010267 (doi: 10.20944/preprints202301.0267.v1).).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0123 | The Shift Paradigm To Classify Separately The Cells and Affected Cells Toward The Totality Under Cancer's Recognition By New Multiple Definitions On the Sets Polynomials Alongside Numbers In The (Neutrosophic) SuperHyperMatching Theory Based on SuperHyperGraph and Neutrosophic SuperHyperGraph | Manuscript

- Henry Garrett, "The Shift Paradigm To Classify Separately The Cells and Affected Cells Toward The Totality Under Cancer's Recognition By New Multiple Definitions On the Sets Polynomials Alongside Numbers In The (Neutrosophic) SuperHyperMatching Theory Based on SuperHyperGraph and Neutrosophic SuperHyperGraph", Preprints 2023, 2023010265 (doi: 10.20944/preprints202301.0265.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0122 | Breaking the Continuity and Uniformity of Cancer In The Worst Case of Full Connections With Extreme Failed SuperHyperClique In Cancer's Recognition Applied in (Neutrosophic) SuperHyperGraphs | Manuscript

- Henry Garrett,"Breaking the Continuity and Uniformity of Cancer In The Worst Case of Full Connections With Extreme Failed SuperHyperClique In Cancer's Recognition Applied in (Neutrosophic) SuperHyperGraphs", Preprints 2023, 2023010262,(doi: 10.20944/preprints202301.0262.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0121 | Neutrosophic Failed SuperHyperStable as the Survivors on the Cancer's Neutrosophic Recognition Based on Uncertainty to All Modes in Neutrosophic SuperHyperGraphs | Manuscript

- Henry Garrett, "Neutrosophic Failed SuperHyperStable as the Survivors on the Cancer's Neutrosophic Recognition Based on Uncertainty to All Modes in Neutrosophic SuperHyperGraphs", Preprints 2023, 2023010240 (doi: 10.20944/preprints202301.0240.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0120 | Extremism of the Attacked Body Under the Cancer's Circumstances Where Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs | Manuscript

- Henry Garrett, "Extremism of the Attacked Body Under the Cancer's Circumstances Where Cancer's Recognition Titled (Neutrosophic) SuperHyperGraphs", Preprints 2023, 2023010224, (doi: 10.20944/preprints202301.0224.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0119 | SuperHyperMatching By (R-)Definitions And Polynomials To Monitor Cancer's Recognition In Neutrosophic SuperHyperGraphs | Manuscript

- Henry Garrett,"SuperHyperMatching By (R-)Definitions And Polynomials To Monitor Cancer's Recognition In Neutrosophic SuperHyperGraphs", ResearchGate 2023,(doi: 10.13140/RG.2.2.35061.65767).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 0118 | The Focus on The Partitions Obtained By Parallel Moves In The Cancer's Extreme Recognition With Different Types of Extreme SuperHyperMatching Set and Polynomial on (Neutrosophic) SuperHyperGraphs — Manuscript

- Henry Garrett,"The Focus on The Partitions Obtained By Parallel Moves In The Cancer's Extreme Recognition With Different Types of Extreme SuperHyperMatching Set and Polynomial on (Neutrosophic) SuperHyperGraphs", ResearchGate 2023,(doi: 10.13140/RG.2.2.18494.15680).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 0117 | Indeterminacy On The All Possible Connections of Cells In Front of Cancer's Attacks In The Terms of Neutrosophic Failed SuperHyperClique on Cancer's Recognition called Neutrosophic SuperHyperGraphs — Manuscript

- Henry Garrett,"Extreme Failed SuperHyperClique Decides the Failures on the Cancer's Recognition in the Perfect Connections of Cancer's Attacks By SuperHyperModels Named (Neutrosophic) SuperHyperGraphs", ResearchGate 2023,(doi: 10.13140/RG.2.2.15897.70243).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 0116 | Extreme Failed SuperHyperClique Decides the Failures on the Cancer's Recognition in the Perfect Connections of Cancer's Attacks By SuperHyperModels Named (Neutrosophic) SuperHyperGraphs — Manuscript

- Henry Garrett,"Extreme Failed SuperHyperClique Decides the Failures on the Cancer's Recognition in the Perfect Connections of Cancer's Attacks By SuperHyperModels Named (Neutrosophic) SuperHyperGraphs", ResearchGate 2023, (doi: 10.13140/RG.2.2.32530.73922).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 0115 | (Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs — Manuscript

- Henry Garrett, "(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs", Preprints 2023, 2023010105 (doi: 10.20944/preprints202301.0105.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 0114 | Perfect Directions Toward Idealism in Cancer's Neutrosophic Recognition Forwarding Neutrosophic SuperHyperClique on Neutrosophic SuperHyperGraphs — Manuscript

- Henry Garrett,"Perfect Directions Toward Idealism in Cancer's Neutrosophic Recognition Forwarding Neutrosophic SuperHyperClique on Neutrosophic SuperHyperGraphs", ResearchGate 2023, (doi: 10.13140/RG.2.2.30092.80004).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 0113 | Demonstrating Complete Connections in Every Embedded Regions and Sub-Regions in the Terms of Cancer's Recognition and (Neutrosophic) SuperHyperGraphs With (Neutrosophic) SuperHyperClique — Manuscript

- Henry Garrett,"Demonstrating Complete Connections in Every Embedded Regions and Sub-Regions in the Terms of Cancer's Recognition and (Neutrosophic) SuperHyperGraphs With (Neutrosophic) SuperHyperClique", ResearchGate 2023, (doi: 10.13140/RG.2.2.23172.19849).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 0112 | Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs — Manuscript

- Henry Garrett, "Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs", Preprints 2023, 2023010105 (doi: 10.20944/preprints202301.0105.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 0111 | Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints — Manuscript

- Henry Garrett, "Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer's Neutrosophic Recognitions In Special ViewPoints", Preprints 2023, 2023010088 (doi: 10.20944/preprints202301.0088.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 0110 | Different Neutrosophic Types of Neutrosophic Regions titled neutrosophic Failed SuperHyperStable in Cancer's Neutrosophic Recognition modeled in the Form of Neutrosophic SuperHyperGraphs — Manuscript

- Henry Garrett,“Different Neutrosophic Types of Neutrosophic Regions titled neutrosophic Failed SuperHyperStable in Cancer’s Neutrosophic Recognition modeled in the Form of Neutrosophic SuperHyperGraphs”, ResearchGate 2023, (doi: 10.13140/RG.2.2.17385.36968).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0109 | 0039 | Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph | Manuscript

- Garrett, Henry. “0039 | Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph.” CERN European Organization for Nuclear Research - Zenodo, Nov. 2022. CERN European Organization for Nuclear Research, https://doi.org/10.5281/zenodo.6319942.

https://oa.mg/work/10.5281/zenodo.6319942

- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0108 | 0049 | (Failed)1-Zero-Forcing Number in Neutrosophic Graphs | Manuscript

- Garrett, Henry. “0049 | (Failed)1-Zero-Forcing Number in Neutrosophic Graphs.” CERN European Organization for Nuclear Research - Zenodo, Feb. 2022. CERN European Organization for Nuclear Research, https://doi.org/10.13140/rg.2.2.35241.26724.

https://oa.mg/work/10.13140/rg.2.2.35241.26724

- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0107 | Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer’s Neutrosophic Recognition And Beyond | Manuscript

- Henry Garrett, “Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer’s Neutrosophic Recognition And Beyond”, Preprints 2023, 2023010044
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0106 | (Neutrosophic) SuperHyperStable on Cancer’s Recognition by Well-SuperHyperModelled (Neutrosophic) SuperHyperGraphs | Manuscript

- Henry Garrett, “(Neutrosophic) SuperHyperStable on Cancer’s Recognition by Well-SuperHyperModelled (Neutrosophic) SuperHyperGraphs”, Preprints 2023, 2023010043 (doi: 10.20944/preprints202301.0043.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0105 | Super Hyper Dominating and Super Hyper Resolving on Neutrosophic Super Hyper Graphs and Their Directions in Game Theory and Neutrosophic Super Hyper Classes | Article

- Henry Garrett, “Super Hyper Dominating and Super Hyper Resolving on Neutrosophic Super Hyper Graphs and Their Directions in Game Theory and Neutrosophic Super Hyper Classes”, J Math Techniques Comput Math 1(3) (2022) 242-263.
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0104 | Using the Tool As (Neutrosophic) Failed SuperHyperStable To SuperHyperModel Cancer’s Recognition Titled (Neutrosophic) SuperHyperGraphs | Manuscript

- Henry Garrett,“Using the Tool As (Neutrosophic) Failed SuperHyperStable To SuperHyperModel Cancer’s Recognition Titled (Neutrosophic) SuperHyperGraphs”, ResearchGate 2023, (doi: 10.13140/RG.2.2.28945.92007).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0103 | Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer’s Neutrosophic Recognitions In Special ViewPoints | Manuscript

- Henry Garrett,“Neutrosophic Messy-Style SuperHyperGraphs To Form Neutrosophic SuperHyperStable To Act on Cancer’s Neutrosophic Recognitions In Special ViewPoints”, ResearchGate 2023, (doi: 10.13140/RG.2.2.11447.80803).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2023 | 0102 | (Neutrosophic) SuperHyperStable on Cancer’s Recognition by Well-SuperHyperModelled (Neutrosophic) SuperHyperGraphs | Manuscript

- Henry Garrett,“(Neutrosophic) SuperHyperStable on Cancer’s Recognition by Well-SuperHyperModelled (Neutrosophic) SuperHyperGraphs”, ResearchGate 2023, (doi: 10.13140/RG.2.2.35774.77123).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0101 | Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond — Manuscript

- Henry Garrett,"Neutrosophic 1-Failed SuperHyperForcing in the SuperHyperFunction To Use Neutrosophic SuperHyperGraphs on Cancer's Neutrosophic Recognition And Beyond", ResearchGate 2022, (doi: 10.13140/RG.2.2.36141.77287).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0100 | (Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs — Manuscript

- Henry Garrett,"(Neutrosophic) 1-Failed SuperHyperForcing in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs", ResearchGate 2022, (doi: 10.13140/RG.2.2.29430.88642).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0099 | Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs — Manuscript

- Henry Garrett,"Basic Notions on (Neutrosophic) SuperHyperForcing And (Neutrosophic) SuperHyperModeling in Cancer's Recognitions And (Neutrosophic) SuperHyperGraphs", ResearchGate 2022, (doi: 10.13140/RG.2.2.11369.16487).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0098 | (Neutrosophic) SuperHyperModeling of Cancer's Recognitions Featuring (Neutrosophic) SuperHyperDefensive SuperHyperAlliances — Manuscript

- Henry Garrett, "(Neutrosophic) SuperHyperModeling of Cancer's Recognitions Featuring (Neutrosophic) SuperHyperDefensive SuperHyperAlliances", Preprints 2022, 2022120549 (doi: 10.20944/preprints202212.0549.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0098 | (Neutrosophic) SuperHyperModeling of Cancer's Recognitions Featuring (Neutrosophic) SuperHyperDefensive SuperHyperAlliances — Manuscript

- Henry Garrett, "(Neutrosophic) SuperHyperModeling of Cancer's Recognitions Featuring (Neutrosophic) SuperHyperDefensive SuperHyperAlliances", ResearchGate 2022, (doi: 10.13140/RG.2.2.19380.94084).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0097 | (Neutrosophic) SuperHyperAlliances With SuperHyperDefensive and SuperHyperOffensive Type-SuperHyperSet On (Neutrosophic) SuperHyperGraph With (Neutrosophic) SuperHyperModeling of Cancer's Recognitions And Related (Neutrosophic) SuperHyperClasses — Manuscript

- Henry Garrett, "(Neutrosophic) SuperHyperAlliances With SuperHyperDefensive and SuperHyperOffensive Type-SuperHyperSet On (Neutrosophic) SuperHyperGraph With (Neutrosophic) SuperHyperModeling of Cancer's Recognitions And Related (Neutrosophic) SuperHyperClasses", Preprints 2022, 2022120540 (doi: 10.20944/preprints202212.0540.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0097 | (Neutrosophic) SuperHyperAlliances With SuperHyperDefensive and SuperHyperOffensive Type-SuperHyperSet On (Neutrosophic) SuperHyperGraph With (Neutrosophic) SuperHyperModeling of Cancer's Recognitions And Related (Neutrosophic) SuperHyperClasses — Manuscript

- Henry Garrett, "(Neutrosophic) SuperHyperAlliances With SuperHyperDefensive and SuperHyperOffensive Type-SuperHyperSet On (Neutrosophic) SuperHyperGraph With (Neutrosophic) SuperHyperModeling of Cancer's Recognitions And Related (Neutrosophic) SuperHyperClasses", ResearchGate 2022, (doi: 10.13140/RG.2.2.14426.41923).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0096 | SuperHyperGirth on SuperHyperGraph and Neutrosophic SuperHyperGraph With SuperHyperModeling of Cancer's Recognitions — Manuscript

- Henry Garrett, "SuperHyperGirth on SuperHyperGraph and Neutrosophic SuperHyperGraph With SuperHyperModeling of Cancer's Recognitions", Preprints 2022, 2022120500 (doi: 10.20944/preprints202212.0500.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0096 | SuperHyperGirth on SuperHyperGraph and Neutrosophic SuperHyperGraph With SuperHyperModeling of Cancer's Recognitions — Manuscript

- Henry Garrett, "SuperHyperGirth on SuperHyperGraph and Neutrosophic SuperHyperGraph With SuperHyperModeling of Cancer's Recognitions", ResearchGate 2022 (doi: 10.13140/RG.2.2.20993.12640).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0095 | Some SuperHyperDegrees and Co-SuperHyperDegrees on Neutrosophic SuperHyperGraphs and SuperHyperGraphs Alongside Applications in Cancer's Treatments Manuscript

- Henry Garrett,"Some SuperHyperDegrees and Co-SuperHyperDegrees on Neutrosophic SuperHyperGraphs and SuperHyperGraphs Alongside Applications in Cancer's Treatments", Preprints 2022, 2022120324 (doi: 10.20944/preprints202212.0324.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0095 | Some SuperHyperDegrees and Co-SuperHyperDegrees on Neutrosophic SuperHyperGraphs And SuperHyperGraphs Alongside Applications in Cancer's Treatments Manuscript

- Henry Garrett, "Some SuperHyperDegrees and Co-SuperHyperDegrees on Neutrosophic SuperHyperGraphs And SuperHyperGraphs Alongside Applications in Cancer's Treatments", ResearchGate 2022 (doi: 10.13140/RG.2.2.23123.04641).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0094 | SuperHyperDominating and SuperHyperResolving on Neutrosophic SuperHyperGraphs And Their Directions in Game Theory and Neutrosophic SuperHyperClasses Manuscript

- Henry Garrett, "SuperHyperDominating and SuperHyperResolving on Neutrosophic SuperHyperGraphs And Their Directions in Game Theory and Neutrosophic SuperHyperClasses", Preprints 2022, 2022110576 (doi: 10.20944/preprints202211.0576.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0094 | SuperHyperDominating and SuperHyperResolving on Neutrosophic SuperHyperGraphs And Their Directions in Game Theory and Neutrosophic SuperHyperClasses Manuscript

- Henry Garrett, "SuperHyperDominating and SuperHyperResolving on Neutrosophic SuperHyperGraphs And Their Directions in Game Theory and Neutrosophic SuperHyperClasses", ResearchGate 2022 (doi: 10.13140/RG.2.2.23324.56966).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0093 | Neutrosophic Co-degree and Neutrosophic Degree alongside Chromatic Numbers in the Setting of Some Classes Related to Neutrosophic Hypergraphs Article

- Henry Garrett, "Neutrosophic Co-degree and Neutrosophic Degree alongside Chromatic Numbers in the Setting of Some Classes Related to Neutrosophic Hypergraphs", J Curr Trends Comp Sci Res 1(1) (2022) 06-14.
PDF,Abstract,Issue.
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0092 | Recognition of the Pattern for Vertices to Make Dimension by Resolving in some Classes of Neutrosophic Graphs Manuscript

- Henry Garrett, "Recognition of the Pattern for Vertices to Make Dimension by Resolving in some Classes of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.27281.51046).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0091 | Regularity of Every Element to Function in the Type of Domination in Neutrosophic Graphs Manuscript

- Henry Garrett, "Regularity of Every Element to Function in the Type of Domination in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.22861.10727).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0090 | Initial Material of Neutrosophic Preliminaries to Study Some Neutrosophic Notions Based on Neutrosophic SuperHyperEdge (NSHE) in Neutrosophic SuperHyperGraph (NSHG) Manuscript

- Henry Garrett, "Initial Material of Neutrosophic Preliminaries to Study Some Neutrosophic Notions Based on Neutrosophic SuperHyperEdge (NSHE) in Neutrosophic SuperHyperGraph (NSHG)", ResearchGate 2022 (doi: 10.13140/RG.2.2.25385.88160).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0089 | Basic Neutrosophic Notions Concerning Neutrosophic SuperHyperDominating and Neutrosophic SuperHyperResolving in Neutrosophic SuperHyperGraph Manuscript

- Henry Garrett, "Basic Neutrosophic Notions Concerning Neutrosophic SuperHyperDominating and Neutrosophic SuperHyperResolving in Neutrosophic SuperHyperGraph", ResearchGate 2022 (doi: 10.13140/RG.2.2.29173.86244).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0088 | Seeking Empty Subgraphs To Determine Different Measurements in Some Classes of Neutrosophic Graphs Manuscript

- Henry Garrett, "Seeking Empty Subgraphs To Determine Different Measurements in Some Classes of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.30448.53766).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0087 | Impacts of Isolated Vertices To Cover Other Vertices in Neutrosophic Graphs Manuscript

- Henry Garrett, "Impacts of Isolated Vertices To Cover Other Vertices in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.16185.44647).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0086 | Perfect Locating of All Vertices in Some Classes of Neutrosophic Graphs Manuscript

- Henry Garrett, "Perfect Locating of All Vertices in Some Classes of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.23971.12326).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0085 | Complete Connections Between Vertices in Neutrosophic Graphs Manuscript

- Henry Garrett, "Complete Connections Between Vertices in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.28860.10885).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0084 | Unique Distance Differentiation By Collection of Vertices in Neutrosophic Graphs Manuscript

- Henry Garrett, "Unique Distance Differentiation By Collection of Vertices in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.17692.77449).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0083 | Single Connection Amid Vertices From Two Given Sets Partitioning Vertex Set in Some Classes of Neutrosophic Graphs Manuscript

- Henry Garrett, "Single Connection Amid Vertices From Two Given Sets Partitioning Vertex Set in Some Classes of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.32189.33764).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0082 | Separate Joint-Sets Representing Separate Numbers Where Classes of Neutrosophic Graphs and Applications are Cases of Study Manuscript

- Henry Garrett, "Separate Joint-Sets Representing Separate Numbers Where Classes of Neutrosophic Graphs and Applications are Cases of Study", ResearchGate 2022 (doi: 10.13140/RG.2.2.22666.95686).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0081 | Repetitive Joint-Sets Featuring Multiple Numbers For Neutrosophic Graphs Manuscript

- Henry Garrett, "Repetitive Joint-Sets Featuring Multiple Numbers For Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.15113.93283).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0080 | Dual-Resolving Numbers Excerpt from Some Classes of Neutrosophic Graphs With Some Applications Manuscript

- Henry Garrett, "Dual-Resolving Numbers Excerpt from Some Classes of Neutrosophic Graphs With Some Applications", ResearchGate 2022 (doi: 10.13140/RG.2.2.14971.39200).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0079 | Dual-Dominating Numbers in Neutrosophic Setting and Crisp Setting Obtained From Classes of Neutrosophic Graphs Manuscript

- Henry Garrett, "Dual-Dominating Numbers in Neutrosophic Setting and Crisp Setting Obtained From Classes of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.19925.91361).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0078 | Neutrosophic Path-Coloring Numbers BasedOn Endpoints In Neutrosophic Graphs Manuscript

- Henry Garrett, "Neutrosophic Path-Coloring Numbers BasedOn Endpoints In Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.27990.11845).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0077 | Neutrosophic Dominating Path-Coloring Numbers in New Visions of Classes of Neutrosophic Graphs Manuscript

- Henry Garrett, "Neutrosophic Dominating Path-Coloring Numbers in New Visions of Classes of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.32151.65445).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0076 | Path Coloring Numbers of Neutrosophic Graphs Based on Shared Edges and Neutrosophic Cardinality of Edges With Some Applications from Real-World Problems Manuscript

- Henry Garrett, "Path Coloring Numbers of Neutrosophic Graphs Based on Shared Edges and Neutrosophic Cardinality of Edges With Some Applications from Real-World Problems", ResearchGate 2022 (doi: 10.13140/RG.2.2.30105.70244).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0075 | Neutrosophic Collapsed Numbers in the Viewpoint of Neutrosophic Graphs Manuscript

- Henry Garrett, "Neutrosophic Collapsed Numbers in the Viewpoint of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.27962.67520).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0074 | Bulky Numbers of Classes of Neutrosophic Graphs Based on Neutrosophic Edges Manuscript

- Henry Garrett, "Bulky Numbers of Classes of Neutrosophic Graphs Based on Neutrosophic Edges", ResearchGate 2022 (doi: 10.13140/RG.2.2.24204.18564).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0073 | Dense Numbers and Minimal Dense Sets of Neutrosophic Graphs Manuscript

- Henry Garrett, "Dense Numbers and Minimal Dense Sets of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.28044.59527).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0072 | Connectivities of Neutrosophic Graphs in the terms of Crisp Cycles Manuscript

- Henry Garrett, "Connectivities of Neutrosophic Graphs in the terms of Crisp Cycles", ResearchGate 2022 (doi: 10.13140/RG.2.2.31917.77281).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0071 | Strong Paths Defining Connectivities in Neutrosophic Graphs Manuscript

- Henry Garrett, "Strong Paths Defining Connectivities in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.17311.43682).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0070 | Finding Longest Weakest Paths assigning numbers to some Classes of Neutrosophic Graphs Manuscript

- Henry Garrett, "Finding Longest Weakest Paths assigning numbers to some Classes of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.35579.59689).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

April 12, 2022 0069 | Properties of SuperHyperGraph and Neutrosophic SuperHyperGraph Article

- Henry Garrett, "Properties of SuperHyperGraph and Neutrosophic SuperHyperGraph", Neutrosophic Sets and Systems 49 (2022) 531-561 (doi: 10.5281/zenodo.6456413). (http://fs.unm.edu/NSS/NeutrosophicSuperHyperGraph34.pdf). (https://digitalrepository.unm.edu/nss_journal/vol49/iss1/34).
- Available at NSS, NSS Gallery, UNM Digital Repository, Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0068 | Relations and Notions amid Hamiltonicity and Eulerian Notions in Some Classes of Neutrosophic Graphs Manuscript

- Henry Garrett, "Relations and Notions amid Hamiltonicity and Eulerian Notions in Some Classes of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.35579.59689).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0067 | Eulerian Results In Neutrosophic Graphs With Applications Manuscript

- Henry Garrett, "Eulerian Results In Neutrosophic Graphs With Applic- ations", ResearchGate 2022 (doi: 10.13140/RG.2.2.34203.34089).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0066 | Finding Hamiltonian Neutrosophic Cycles in Classes of Neutrosophic Graphs Manuscript

- Henry Garrett, "Finding Hamiltonian Neutrosophic Cycles in Classes of Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.29071.87200).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0065 | Extending Sets Type-Results in Neutrosophic Graphs Manuscript

- Henry Garrett, "Extending Sets Type-Results in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.13317.01767).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0064 | Some Polynomials Related to Numbers in Classes of (Strong) Neutrosophic Graphs Manuscript

- Henry Garrett, "Some Polynomials Related to Numbers in Classes of (Strong) Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.36280.83204).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0063 | Finding Shortest Sequences of Consecutive Vertices in Neutrosophic Graphs Manuscript

- Henry Garrett, "Finding Shortest Sequences of Consecutive Vertices in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.22924.59526).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0062 | Neutrosophic Girth Based On Crisp Cycle in Neutrosophic Graphs Manuscript

- Henry Garrett, "Neutrosophic Girth Based On Crisp Cycle in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.14011.69923).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0061 | e-Matching Number and e-Matching Polynomials in Neutrosophic Graphs Manuscript

- Henry Garrett, "e-Matching Number and e-Matching Polynomials in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.32516.60805).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0060 | Matching Polynomials in Neutrosophic Graphs Manuscript

- Henry Garrett, "Matching Polynomials in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.33630.72002).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0059 | Some Results in Classes Of Neutrosophic Graphs Manuscript

- Henry Garrett, "Some Results in Classes Of Neutrosophic Graphs", Preprints 2022, 2022030248 (doi: 10.20944/preprints202203.0248.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0058 | Matching Number in Neutrosophic Graphs Manuscript

- Henry Garrett, "Matching Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.18609.86882).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0057 | Fuzzy Dominating Number Based On Fuzzy Bridge And Applicaions | Article

- M. Hamidi, and M. Nikfar, "Fuzzy Dominating Number Based On Fuzzy Bridge And Applicaions", Fuzzy Systems and its Applications 4(2) (2022) 205-229 (https://doi.org/10.22034/jfsa.2022.306606.1092).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

Oct 2018 | 0056 | The Effects of Mathematics on Computer Sciences | Conference Article

- M. Nikfar, "The Effects of Mathematics on Computer Sciences", Second Conference on the Education and Applications of Mathematics, Kermanshah, Iran, 2018 (https://en.civilica.com/doc/824659).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0055 | (Failed) 1-clique Number in Neutrosophic Graphs | Manuscript

- Henry Garrett, "(Failed) 1-Clique Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.14241.89449).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0054 | Failed Clique Number in Neutrosophic Graphs | Manuscript

- Henry Garrett, "Failed Clique Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.36039.16800).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0053 | Clique Number in Neutrosophic Graphs | Manuscript

- Henry Garrett, "Clique Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.28338.68800).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0052 | (Failed) 1-independent Number in Neutrosophic Graphs | Manuscript

- Henry Garrett, "(Failed) 1-Independent Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.30593.12643).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0051 | Failed Independent Number in Neutrosophic Graphs | Manuscript

- Henry Garrett, "Failed Independent Number in Neutrosophic Graphs", Preprints 2022, 2022020334 (doi: 10.20944/preprints202202.0334.v2)
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0051 | Failed Independent Number in Neutrosophic Graphs | Manuscript

- Henry Garrett, "Failed Independent Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.31196.05768).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0050 | Independent Set in Neutrosophic Graphs | Manuscript

- Henry Garrett, "Independent Set in Neutrosophic Graphs", Preprints 2022, 2022020334 (doi: 10.20944/preprints202202.0334.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0050 | Independent Set in Neutrosophic Graphs | Manuscript

- Henry Garrett, "Independent Set in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.17472.81925).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 | 0049 | (Failed)1-Zero-Forcing Number in Neutrosophic Graphs | Manuscript

- Henry Garrett, "(Failed)1-Zero-Forcing Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.35241.26724).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0048 | Failed Zero-Forcing Number in Neutrosophic Graphs Manuscript

- Henry Garrett, "Failed Zero-Forcing Number in Neutrosophic Graphs", Preprints 2022, 2022020343 (doi: 10.20944/preprints202202.0343.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0048 | Failed Zero-Forcing Number in Neutrosophic Graphs Manuscript

- Henry Garrett, "Failed Zero-Forcing Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.24873.47209).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0047 | Zero Forcing Number in Neutrosophic Graphs Manuscript

- Henry Garrett, "Zero Forcing Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.32265.93286).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0046 | Quasi-Number in Neutrosophic Graphs Manuscript

- Henry Garrett, "Quasi-Number in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.18470.60488).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0045 | Quasi-Degree in Neutrosophic Graphs Manuscript

- Henry Garrett, "Quasi-Degree in Neutrosophic Graphs", Preprints 2022, 2022020100 (doi: 10.20944/preprints202202.0100.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0045 | Quasi-Degree in Neutrosophic Graphs Manuscript

- Henry Garrett, "Quasi-Degree in ResearchGate 2022 (doi: 10.13140/RG.2.2.25460.01927).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0044 | Co-Neighborhood in Neutrosophic Graphs Manuscript

- Henry Garrett, "Co-Neighborhood in Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.17687.44964).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0043 | Global Powerful Alliance in Strong Neutrosophic Graphs Manuscript

- Henry Garrett, "Global Powerful Alliance in Strong Neutrosophic Graphs", Preprints 2022, 2022010429 (doi: 10.20944/preprints202201.0429.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0043 | Global Powerful Alliance in Strong Neutrosophic Graphs Manuscript

- Henry Garrett, "Global Powerful Alliance in Strong Neutrosophic Graphs", ResearchGate 2022 (doi: 10.13140/RG.2.2.31784.24322).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0042 | Global Offensive Alliance in Strong Neutrosophic Graphs Manuscript

- Henry Garrett, "Global Offensive Alliance in Strong Neutrosophic Graphs", Preprints 2022, 2022010429 (doi: 10.20944/preprints202201.0429.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0042 | Global Offensive Alliance in Strong Neutrosophic Graphs Manuscript

- Henry Garrett, “Global Offensive Alliance in Strong Neutrosophic Graphs”, ResearchGate 2022 (doi: 10.13140/RG.2.2.26541.20961).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0041 | Three Types of Neutrosophic Alliances based on Connectedness and (Strong) Edges Manuscript

- Henry Garrett, “Three Types of Neutrosophic Alliances based on Connectedness and (Strong) Edges”, Preprints 2022, 2022010239 (doi: 10.20944/preprints202201.0239.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0041 | Three Types of Neutrosophic Alliances based on Connectedness and (Strong) Edges Manuscript

- Henry Garrett, “Three Types of Neutrosophic Alliances based on Connectedness and (Strong) Edges”, ResearchGate 2022 (doi: 10.13140/RG.2.2.18486.83521).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0040 | Three types of neutrosophic alliances based of connectedness and (strong) edges (In-Progress) Manuscript

- Henry Garrett, “Three types of neutrosophic alliances based of connectedness and (strong) edges (In-Progress)”, ResearchGate 2022 (doi: 10.13140/RG.2.2.27570.12480).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0039 | Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph Manuscript

- Henry Garrett, “Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph”, Preprints 2022, 2022010145 (doi: 10.20944/preprints202201.0145.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0039 | Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph Manuscript

- Henry Garrett, “Closing Numbers and Super-Closing Numbers as (Dual)Resolving and (Dual)Coloring alongside (Dual)Dominating in (Neutrosophic)n-SuperHyperGraph”, ResearchGate 2022 (doi: 10.13140/RG.2.2.18909.54244/1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0038 | Co-degree and Degree of classes of Neutrosophic Hypergraphs Manuscript

- Henry Garrett, “Co-degree and Degree of classes of Neutrosophic Hypergraphs”, Preprints 2022, 2022010027 (doi: 10.20944/preprints202201.0027.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2022 0038 | Co-degree and Degree of classes of Neutrosophic Hypergraphs Manuscript

- Henry Garrett, “Co-degree and Degree of classes of Neutrosophic Hypergraphs”, ResearchGate 2022 (doi: 10.13140/RG.2.2.32672.10249).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0037 | Dimension and Coloring alongside Domination in Neutrosophic Hypergraphs Manuscript

- Henry Garrett, “Dimension and Coloring alongside Domination in Neutrosophic Hypergraphs”, Preprints 2021, 2021120448 (doi: 10.20944/preprints202112.0448.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0037 | Dimension and Coloring alongside Domination in Neutrosophic Hypergraphs Manuscript

- Henry Garrett, “Dimension and Coloring alongside Domination in Neutrosophic Hypergraphs”, ResearchGate 2021 (doi: 10.13140/RG.2.2.13070.28483).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0036 | Different Types of Neutrosophic Chromatic Number Manuscript

- Henry Garrett, "Different Types of Neutrosophic Chromatic Number", Preprints 2021, 2021120335 (doi: 10.20944/preprints202112.0335.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0036 | Different Types of Neutrosophic Chromatic Number Manuscript

- Henry Garrett, "Different Types of Neutrosophic Chromatic Number", ResearchGate 2021 (doi: 10.13140/RG.2.2.19068.46723).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0035 | Neutrosophic Chromatic Number Based on Connectedness Manuscript

- Henry Garrett, "Neutrosophic Chromatic Number Based on Connectedness", Preprints 2021, 2021120226 (doi: 10.20944/preprints202112.0226.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0035 | Neutrosophic Chromatic Number Based on Connectedness Manuscript

- Henry Garrett, "Neutrosophic Chromatic Number Based on Connectedness", ResearchGate 2021 (doi: 10.13140/RG.2.2.18563.84001).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0034 | Chromatic Number and Neutrosophic Chromatic Number Manuscript

- Henry Garrett, "Chromatic Number and Neutrosophic Chromatic Number", Preprints 2021, 2021120177 (doi: 10.20944/preprints202112.0177.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0034 | Chromatic Number and Neutrosophic Chromatic Number Manuscript

- Henry Garrett, "Chromatic Number and Neutrosophic Chromatic Number", ResearchGate 2021 (doi: 10.13140/RG.2.2.36035.73766).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0033 | Metric Dimension in fuzzy(neutrosophic) Graphs #12 Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs #12", ResearchGate 2021 (doi: 10.13140/RG.2.2.20690.48322).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0032 | Metric Dimension in fuzzy(neutrosophic) Graphs #11 Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs #11", ResearchGate 2021 (doi: 10.13140/RG.2.2.29308.46725).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0031 | Metric Dimension in fuzzy(neutrosophic) Graphs #10 Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs #10", ResearchGate 2021 (doi: 10.13140/RG.2.2.21614.54085).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0030 | Metric Dimension in fuzzy(neutrosophic) Graphs #9 Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs #9", ResearchGate 2021 (doi: 10.13140/RG.2.2.34040.16648).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0029 | Metric Dimension in fuzzy(neutrosophic) Graphs #8 Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs #8", ResearchGate 2021 (doi: 10.13140/RG.2.2.19464.96007).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0028 | Metric Dimension in fuzzy(neutrosophic) Graphs-VII Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs-VII", ResearchGate 2021 (doi: 10.13140/RG.2.2.14667.72481).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0028 | Metric Dimension in fuzzy(neutrosophic) Graphs-VII Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs-VII", Preprints 2021, 2021110142 (doi: 10.20944/preprints202111.0142.v7).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0027 | Metric Dimension in fuzzy(neutrosophic) Graphs-VI Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs-VI", Preprints 2021, 2021110142 (doi: 10.20944/preprints202111.0142.v6).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0026 | Metric Dimension in fuzzy(neutrosophic) Graphs-V Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs-V", Preprints 2021, 2021110142 (doi: 10.20944/preprints202111.0142.v5).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0025 | Metric Dimension in fuzzy(neutrosophic) Graphs-IV Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs-IV", Preprints 2021, 2021110142 (doi: 10.20944/preprints202111.0142.v4).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0024 | Metric Dimension in fuzzy(neutrosophic) Graphs-III Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs-III", Preprints 2021, 2021110142 (doi: 10.20944/preprints202111.0142.v3).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0023 | Metric Dimension in fuzzy(neutrosophic) Graphs-II Manuscript

- Henry Garrett, "Metric Dimension in fuzzy(neutrosophic) Graphs-II", Preprints 2021, 2021110142 (doi: 10.20944/preprints202111.0142.v2).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0022 | Metric Dimension in Fuzzy Graphs and Neutrosophic Graphs Manuscript

- Henry Garrett, "Metric Dimension in Fuzzy Graphs and Neutrosophic Graphs", Preprints 2021, 2021110142 (doi: 10.20944/preprints202111.0142.v1)
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0021 | Valued Number And Set Manuscript

- Henry Garrett, "Valued Number And Set", Preprints 2021, 2021080229 (doi: 10.20944/preprints202108.0229.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0020 | Notion of Valued Set Manuscript

- Henry Garrett, "Notion of Valued Set", Preprints 2021, 2021070410 (doi: 10.20944/preprints202107.0410.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0019 | Set And Its Operations Manuscript

- Henry Garrett, "Set And Its Operations", Preprints 2021, 2021060508 (doi: 10.20944/preprints202106.0508.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0018 | Metric Dimensions Of Graphs Manuscript

- Henry Garrett, "Metric Dimensions Of Graphs", Preprints 2021, 2021060392 (doi: 10.20944/preprints202106.0392.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0017 | New Graph Of Graph Manuscript

- Henry Garrett, "New Graph Of Graph", Preprints 2021, 2021060323 (doi: 10.20944/preprints202106.0323.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0016 | Numbers Based On Edges Manuscript

- Henry Garrett, "Numbers Based On Edges", Preprints 2021, 2021060315 (doi: 10.20944/preprints202106.0315.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0015 | Locating And Location Number Manuscript

- Henry Garrett, "Locating And Location Number", Preprints 2021, 2021060206 (doi: 10.20944/preprints202106.0206.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0014 | Big Sets Of Vertices Manuscript

- Henry Garrett, "Big Sets Of Vertices", Preprints 2021, 2021060189 (doi: 10.20944/preprints202106.0189.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0013 | Matroid And Its Outlines Manuscript

- Henry Garrett, "Matroid And Its Outlines", Preprints 2021, 2021060146 (doi: 10.20944/preprints202106.0146.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0012 | Matroid And Its Relations Manuscript

- Henry Garrett, "Matroid And Its Relations", Preprints 2021, 2021060080 (doi: 10.20944/preprints202106.0080.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2021 0011 | Metric Number in Dimension Manuscript

- Henry Garrett, "Metric Number in Dimension", Preprints 2021, 2021060004 (doi: 10.20944/preprints202106.0004.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2018 0010 | A Study on Domination in two Fuzzy Models Manuscript

- M. Nikfar, "A Study on Domination in two Fuzzy Models", Preprints 2018, 2018040119 (doi: 10.20944/preprints201804.0119.v2).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2019 0009 | Nikfar Domination Versus Others: Restriction, Extension Theorems and Monstrous Examples Manuscript

- M. Nikfar, "Nikfar Domination Versus Others: Restriction, Extension Theorems and Monstrous Examples", Preprints 2019, 2019010024 (doi: 10.20944/preprints201901.0024.v3).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2019 0008 | Nikfar Dominations: Definitions, Theorems, and Connections Manuscript

- M. Nikfar, "Nikfar Dominations: Definitions, Theorems, and Connections", ResearchGate 2019 (doi: 10.13140/RG.2.2.28955.31526/1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2019 0007 | Nikfar Domination in Fuzzy Graphs Manuscript

- M. Nikfar, "Nikfar Domination in Fuzzy Graphs", Preprints 2019, 2019010024 (doi: 10.20944/preprints201901.0024.v2).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2019 0006 | Nikfar Domination in Fuzzy Graphs Manuscript

- M. Nikfar, "Nikfar Domination in Fuzzy Graphs", Preprints 2019, 2019010024 (doi: 10.20944/preprints201901.0024.v2).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2018 0005 | The Results on Vertex Domination in Fuzzy Graphs Manuscript

- M. Nikfar, "The Results on Vertex Domination in Fuzzy Graphs", Preprints 2018, 2018040085 (doi: 10.20944/preprints201804.0085.v2).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2019 0004 | Nikfar Domination in Fuzzy Graphs Manuscript

- M. Nikfar, "Nikfar Domination in Fuzzy Graphs", Preprints 2019, 2019010024 (doi: 10.20944/preprints201901.0024.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2019 0003 | Nikfar Domination in Neutrosophic Graphs Manuscript

- M. Nikfar, "Nikfar Domination in Neutrosophic Graphs", Preprints 2019, 2019010025 (doi: 10.20944/preprints201901.0025.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2018 0002 | Vertex Domination in t-Norm Fuzzy Graphs Manuscript

- M. Nikfar, "Vertex Domination in t-Norm Fuzzy Graphs", Preprints 2018, 2018040119 (doi: 10.20944/preprints201804.0119.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

2018 0001 | The Results on Vertex Domination in Fuzzy Graphs Manuscript

- M. Nikfar, "The Results on Vertex Domination in Fuzzy Graphs", Preprints 2018, 2018040085 (doi: 10.20944/preprints201804.0085.v1).
- Available at Twitter, ResearchGate, Scribd, Academia, Zenodo, LinkedIn

Publications: Books

2023 0069 | SuperHyperMatching Amazon

- ASIN : B0BSDPXX1P Publisher : Independently published (January 15, 2023) Language : English Paperback : 582 pages ISBN-13 : 979-8373872683 Item Weight : 3.6 pounds Dimensions : 8.5 x 1.37 x 11 inches
- ASIN : B0BSDC1L66 Publisher : Independently published (January 16, 2023) Language : English Hardcover : 548 pages ISBN-13 : 979-8373875424 Item Weight : 3.3 pounds Dimensions : 8.25 x 1.48 x 11 inches

2023 0068 | Failed SuperHyperClique Amazon

- ASIN : B0BRZ67NYN Publisher : Independently published (January 10, 2023) Language : English Paperback : 454 pages ISBN-13 : 979-8373274227 Item Weight : 2.83 pounds Dimensions : 8.5 x 1.07 x 11 inches
- ASIN : B0BRYZTK24 Publisher : Independently published (January 10, 2023) Language : English Hardcover : 460 pages ISBN-13 : 979-8373277273 Item Weight : 2.78 pounds Dimensions : 8.25 x 1.27 x 11 inches

2023 0067 | SuperHyperClique Amazon

- ASIN : B0BRWK4S1Y Publisher : Independently published (January 8, 2023) Language : English Paperback : 376 pages ISBN-13 : 979-8373040471 Item Weight : 2.36 pounds Dimensions : 8.5 x 0.89 x 11 inches
- ASIN : B0BRM24YJX Publisher : Independently published (January 8, 2023) Language : English Hardcover : 388 pages ISBN-13 : 979-8373041935 Item Weight : 2.36 pounds Dimensions : 8.25 x 1.1 x 11 inches

2023 0066 | Failed SuperHyperStable Amazon

- ASIN : B0BRNG7DC8 Publisher : Independently published (January 4, 2023) Language : English Paperback : 304 pages ISBN-13 : 979-8372597976 Item Weight : 1.93 pounds Dimensions : 8.5 x 0.72 x 11 inches
- ASIN : B0BRLVN39L Publisher : Independently published (January 4, 2023) Language : English Hardcover : 306 pages ISBN-13 : 979-8372599765 Item Weight : 1.89 pounds Dimensions : 8.25 x 0.91 x 11 inches

2023 0065 | SuperHyperStable Amazon

- ASIN : B0BRDG5Z4Y Publisher : Independently published (January 2, 2023) Language : English Paperback : 294 pages ISBN-13 : 979-8372248519 Item Weight : 1.93 pounds Dimensions : 8.27 x 0.7 x 11.69 inches
- ASIN : B0BRJPG56M Publisher : Independently published (January 2, 2023) Language : English Hardcover : 290 pages ISBN-13 : 979-8372252011 Item Weight : 1.79 pounds Dimensions : 8.25 x 0.87 x 11 inches

2023 0064 | Failed SuperHyperForcing Amazon

- ASIN : B0BRH5B4QM Publisher : Independently published (January 1, 2023) Language : English Paperback : 337 pages ISBN-13 : 979-8372123649 Item Weight : 2.13 pounds Dimensions : 8.5 x 0.8 x 11 inches
- ASIN : B0BRGX4DBJ Publisher : Independently published (January 1, 2023) Language : English Hardcover : 337 pages ISBN-13 : 979-8372124509 Item Weight : 2.07 pounds Dimensions : 8.25 x 0.98 x 11 inches

2022 0063 | SuperHyperForcing Amazon

- ASIN : B0BRDG1KN1 Publisher : Independently published (December 30, 2022) Language : English Paperback : 285 pages ISBN-13 : 979-8371873347 Item Weight : 1.82 pounds Dimensions : 8.5 x 0.67 x 11 inches
- ASIN : B0BRDFFQMF Publisher : Independently published (December 30, 2022) Language : English Hardcover : 285 pages ISBN-13 : 979-8371874092 Item Weight : 1.77 pounds Dimensions : 8.25 x 0.86 x 11 inches

2022 0062 | SuperHyperAlliances Amazon

- ASIN : B0BR6YC3HG Publisher : Independently published (December 27, 2022) Language : English Paperback : 189 pages ISBN-13 : 979-8371488343 Item Weight : 1.24 pounds Dimensions : 8.5 x 0.45 x 11 inches
- ASIN : B0BR7CBTC6 Publisher : Independently published (December 27, 2022) Language : English Hardcover : 189 pages ISBN-13 : 979-8371494849 Item Weight : 1.21 pounds Dimensions : 8.25 x 0.64 x 11 inches

2022 0061 | SuperHyperGraphs Amazon

- ASIN : B0BR1NHY4Z Publisher : Independently published (December 24, 2022) Language : English Paperback : 117 pages ISBN-13 : 979-8371090133 Item Weight : 13 ounces Dimensions : 8.5 x 0.28 x 11 inches
- ASIN : B0BQXTHTXY Publisher : Independently published (December 24, 2022) Language : English Hardcover : 117 pages ISBN-13 : 979-8371093240 Item Weight : 12.6 ounces Dimensions : 8.25 x 0.47 x 11 inches

2022 0060 | Neut. SuperHyperEdges Amazon

- ASIN : B0BNH11ZDY Publisher : Independently published (November 27, 2022) Language : English Paperback : 107 pages ISBN-13 : 979-8365922365 Item Weight : 12 ounces Dimensions : 8.5 x 0.26 x 11 inches
- ASIN : B0BNGZGPP6 Publisher : Independently published (November 27, 2022) Language : English Hardcover : 107 pages ISBN-13 : 979-8365923980 Item Weight : 11.7 ounces Dimensions : 8.25 x 0.45 x 11 inches

2022 0059 | Neutrosophic k-Number Amazon

- ASIN : B0BF3P5X4N Publisher : Independently published (September 14, 2022) Language : English Paperback : 159 pages ISBN-13 : 979-8352590843 Item Weight : 1.06 pounds Dimensions : 8.5 x 0.38 x 11 inches
- ASIN : B0BF2XCDZM Publisher : Independently published (September 14, 2022) Language : English Hardcover : 159 pages ISBN-13 : 979-8352593394 Item Weight : 1.04 pounds Dimensions : 8.25 x 0.57 x 11 inches

2022 0058 | Neutrosophic Schedule Amazon

- ASIN : B0BBJWJJZF Publisher : Independently published (August 22, 2022) Language : English Paperback : 493 pages ISBN-13 : 979-8847885256 Item Weight : 3.07 pounds Dimensions : 8.5 x 1.16 x 11 inches
- ASIN : B0BBJLPWKH Publisher : Independently published (August 22, 2022) Language : English Hardcover : 493 pages ISBN-13 : 979-8847886055 Item Weight : 2.98 pounds Dimensions : 8.25 x 1.35 x 11 inches

2022 0057 | Neutrosophic Wheel Amazon

- ASIN : B0BBJRHXXG Publisher : Independently published (August 22, 2022) Language : English Paperback : 195 pages ISBN-13 : 979-8847865944 Item Weight : 1.28 pounds Dimensions : 8.5 x 0.46 x 11 inches
- ASIN : B0BBK3KG82 Publisher : Independently published (August 22, 2022) Language : English Hardcover : 195 pages ISBN-13 : 979-8847867016 Item Weight : 1.25 pounds Dimensions : 8.25 x 0.65 x 11 inches

2022 0056 | Neutrosophic t-partite Amazon

- ASIN : B0BBJLZCHS Publisher : Independently published (August 22, 2022) Language : English Paperback : 235 pages ISBN-13 : 979-8847834957 Item Weight : 1.52 pounds Dimensions : 8.5 x 0.56 x 11 inches
- ASIN : B0BBJDFGJS Publisher : Independently published (August 22, 2022) Language : English Hardcover : 235 pages ISBN-13 : 979-8847838337 Item Weight : 1.48 pounds Dimensions : 8.25 x 0.75 x 11 inches

2022 0055 | Neutrosophic Bipartite Amazon

- ASIN : B0BB5Z9GHW Publisher : Independently published (August 22, 2022) Language : English Paperback : 225 pages ISBN-13 : 979-8847820660 Item Weight : 1.46 pounds Dimensions : 8.5 x 0.53 x 11 inches
- ASIN : B0BBGG9RDZ Publisher : Independently published (August 22, 2022) Language : English Hardcover : 225 pages ISBN-13 : 979-8847821667 Item Weight : 1.42 pounds Dimensions : 8.25 x 0.72 x 11 inches

2022 0054 | Neutrosophic Star Amazon

- ASIN : B0BB5ZHSSZ Publisher : Independently published (August 22, 2022) Language : English Paperback : 215 pages ISBN-13 : 979-8847794374 Item Weight : 1.4 pounds Dimensions : 8.5 x 0.51 x 11 inches
- ASIN : B0BBC4BL9P Publisher : Independently published (August 22, 2022) Language : English Hardcover : 215 pages ISBN-13 : 979-8847796941 Item Weight : 1.36 pounds Dimensions : 8.25 x 0.7 x 11 inches

2022 0053 | Neutrosophic Cycle Amazon

- ASIN : B0BB62NZQK Publisher : Independently published (August 22, 2022) Language : English Paperback : 343 pages ISBN-13 : 979-8847780834 Item Weight : 2.17 pounds Dimensions : 8.5 x 0.81 x 11 inches
- ASIN : B0BB65QMKQ Publisher : Independently published (August 22, 2022) Language : English Hardcover : 343 pages ISBN-13 : 979-8847782715 Item Weight : 2.11 pounds Dimensions : 8.25 x 1 x 11 inches

2022 0052 | Neutrosophic Path Amazon

- ASIN : B0BB67WCXL Publisher : Independently published (August 8, 2022) Language : English Paperback : 315 pages ISBN-13 : 979-8847730570 Item Weight : 2 pounds Dimensions : 8.5 x 0.74 x 11 inches
- ASIN : B0BB5Z9FXL Publisher : Independently published (August 8, 2022) Language : English Hardcover : 315 pages ISBN-13 : 979-8847731263 Item Weight : 1.95 pounds Dimensions : 8.25 x 0.93 x 11 inches

2022 0051 | Neutrosophic Complete Amazon

- ASIN : B0BB6191KN Publisher : Independently published (August 8, 2022) Language : English Paperback : 227 pages ISBN-13 : 979-8847720878 Item Weight : 1.47 pounds Dimensions : 8.5 x 0.54 x 11 inches
- ASIN : B0BB5RRQN7 Publisher : Independently published (August 8, 2022) Language : English Hardcover : 227 pages ISBN-13 : 979-8847721844 Item Weight : 1.43 pounds Dimensions : 8.25 x 0.73 x 11 inches

2022 0050 | Neutrosophic Dominating Amazon

- ASIN : B0BB5QV8WT Publisher : Independently published (August 8, 2022) Language : English Paperback : 357 pages ISBN-13 : 979-8847592000 Item Weight : 2.25 pounds Dimensions : 8.5 x 0.84 x 11 inches
- ASIN : B0BB61WL9M Publisher : Independently published (August 8, 2022) Language : English Hardcover : 357 pages ISBN-13 : 979-8847593755 Item Weight : 2.19 pounds Dimensions : 8.25 x 1.03 x 11 inches

2022 0049 | Neutrosophic Resolving Amazon

- ASIN : B0BBCJMRH8 Publisher : Independently published (August 8, 2022) Language : English Paperback : 367 pages ISBN-13 : 979-8847587891 Item Weight : 2.31 pounds Dimensions : 8.5 x 0.87 x 11 inches
- ASIN : B0BBCB6DFC Publisher : Independently published (August 8, 2022) Language : English Hardcover : 367 pages ISBN-13 : 979-8847589987 Item Weight : 2.25 pounds Dimensions : 8.25 x 1.06 x 11 inches

2022 0048 | Neutrosophic Stable Amazon

- ASIN : B0B7QGTNFW Publisher : Independently published (July 28, 2022) Language : English Paperback : 133 pages ISBN-13 : 979-8842880348 Item Weight : 14.6 ounces Dimensions : 8.5 x 0.32 x 11 inches
- ASIN : B0B7QJWQ35 Publisher : Independently published (July 28, 2022) Language : English Hardcover : 133 pages ISBN-13 : 979-8842881659 Item Weight : 14.2 ounces Dimensions : 8.25 x 0.51 x 11 inches

2022 0047 | Neutrosophic Total Amazon

- ASIN : B0B7GLB23F Publisher : Independently published (July 25, 2022) Language : English Paperback : 137 pages ISBN-13 : 979-8842357741 Item Weight : 14.9 ounces Dimensions : 8.5 x 0.33 x 11 inches
- ASIN : B0B6XVTDYC Publisher : Independently published (July 25, 2022) Language : English Hardcover : 137 pages ISBN-13 : 979-8842358915 Item Weight : 14.6 ounces Dimensions : 8.25 x 0.52 x 11 inches

2022 0046 | Neutrosophic Perfect Amazon

- ASIN : B0B7CJHCYZ Publisher : Independently published (July 22, 2022) Language : English Paperback : 127 pages ISBN-13 : 979-8842027330 Item Weight : 13.9 ounces Dimensions : 8.5 x 0.3 x 11 inches
- ASIN : B0B7C732Z1 Publisher : Independently published (July 22, 2022) Language : English Hardcover : 127 pages ISBN-13 : 979-8842028757 Item Weight : 13.6 ounces Dimensions : 8.25 x 0.49 x 11 inches

2022 0045 | Neutrosophic Joint Set Amazon

- ASIN : B0B6L8WJ77 Publisher : Independently published (July 15, 2022) Language : English Paperback : 139 pages ISBN-13 : 979-8840802199 Item Weight : 15 ounces Dimensions : 8.5 x 0.33 x 11 inches
- ASIN : B0B6L9GJWR Publisher : Independently published (July 15, 2022) Language : English Hardcover : 139 pages ISBN-13 : 979-8840803295 Item Weight : 14.7 ounces Dimensions : 8.25 x 0.52 x 11 inches

August 30, 2022 0044 | Neutrosophic Duality GLOBAL KNOWLEDGE - Publishing House&Amazon&Google Scholar&UNM

- Neutrosophic Duality, GLOBAL KNOWLEDGE - Publishing House:
GLOBAL KNOWLEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. ISBN: 978-1-59973-743-0
Henry Garrett, (2022). “Neutrosophic Duality”, Florida: GLOBAL KNOWLEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. ISBN: 978-1-59973-743-0 (http://fs.unm.edu/NeutrosophicDuality.pdf).
- ASIN : B0B4SJ8Y44 Publisher : Independently published (June 22, 2022) Language : English Paperback : 115 pages ISBN-13 : 979-8837647598 Item Weight : 12.8 ounces Dimensions : 8.5 x 0.27 x 11 inches
ASIN : B0B46B4CXT Publisher : Independently published (June 22, 2022) Language : English Hardcover : 115 pages ISBN-13 : 979-8837649981 Item Weight : 12.5 ounces Dimensions : 8.25 x 0.46 x 11 inches

GLOBAL KNOWLEDGE - Publishing House: http://fs.unm.edu/NeutrosophicDuality.pdf
UNM: http://fs.unm.edu/NeutrosophicDuality.pdf
Google Scholar: https://books.google.com/books?id=dWWkEAAAQBAJ
Paperback: https://www.amazon.com/dp/B0B4SJ8Y44
Hardcover: https://www.amazon.com/dp/B0B46B4CXT

2022 0043 | Neutrosophic Path-Coloring Amazon

- ASIN : B0B3F2BZC4 Publisher : Independently published (June 7, 2022) Language : English Paperback : 161 pages ISBN-13 : 979-8834894469 Item Weight : 1.08 pounds Dimensions : 8.5 x 0.38 x 11 inches
- ASIN : B0B3FGPGQ3 Publisher : Independently published (June 7, 2022) Language : English Hardcover : 161 pages ISBN-13 : 979-8834895954 Item Weight : 1.05 pounds Dimensions : 8.25 x 0.57 x 11 inches

2022 0042 | Neutrosophic Density Amazon

- ASIN : B0B19CDX7W Publisher : Independently published (May 15, 2022) Language : English Paperback : 145 pages ISBN-13 : 979-8827498285 Item Weight : 15.7 ounces Dimensions : 8.5 x 0.35 x 11 inches
- ASIN : B0B14PLPGL Publisher : Independently published (May 15, 2022) Language : English Hardcover : 145 pages ISBN-13 : 979-8827502944 Item Weight : 15.4 ounces Dimensions : 8.25 x 0.53 x 11 inches

2022 0041 | Properties of SuperHyperGraph and Neutrosophic SuperHyperGraph Google Commerce Ltd

- Publisher Infinite Study Seller Google Commerce Ltd Published on Apr 27, 2022 Pages 30 Features Original pages Best for web, tablet, phone, eReader Language English Genres Antiques & Collectibles / Reference Content protection This content is DRM free GooglePlay
- Properties of SuperHyperGraph and Neutrosophic SuperHyperGraph Front Cover Henry Garrett Infinite Study, 27 Apr 2022 - Antiques & Collectibles - 30 pages GoogleBooks
Henry Garrett, "Properties of SuperHyperGraph and Neutrosophic SuperHyperGraph", Neutrosophic Sets and Systems 49 (2022) 531-561 (doi: 893 10.5281/zenodo.6456413). (http://fs.unm.edu/NSS/NeutrosophicSuperHyperGraph34.pdf).

2022 0040 | Neutrosophic Connectivity Amazon

- ASIN : B09YQJG2ZV Publisher : Independently published (April 26, 2022) Language : English Paperback : 121 pages ISBN-13 : 979-8811310968 Item Weight : 13.4 ounces Dimensions : 8.5 x 0.29 x 11 inches
- ASIN : B09YQJG2DZ Publisher : Independently published (April 26, 2022) Language : English Hardcover : 121 pages ISBN-13 : 979-8811316304 Item Weight : 13.1 ounces Dimensions : 8.25 x 0.48 x 11 inches

2022 0039 | Neutrosophic Cycles Amazon

- ASIN : B09X4KVLQG Publisher : Independently published (April 8, 2022) Language : English Paperback : 169 pages ISBN-13 : 979-8449137098 Item Weight : 1.12 pounds Dimensions : 8.5 x 0.4 x 11 inches
- ASIN : B09X4LZ3HL Publisher : Independently published (April 8, 2022) Language : English Hardcover : 169 pages ISBN-13 : 979-8449144157 Item Weight : 1.09 pounds Dimensions : 8.25 x 0.59 x 11 inches

2022 0038 | Girth in Neutrosophic Graphs Amazon

- ASIN : B09WQ5PFV8 Publisher : Independently published (March 29, 2022) Language : English Paperback : 163 pages ISBN-13 : 979-8442380538 Item Weight : 1.09 pounds Dimensions : 8.5 x 0.39 x 11 inches
- ASIN : B09WQQGXPZ Publisher : Independently published (March 29, 2022) Language : English Hardcover : 163 pages ISBN-13 : 979-8442386592 Item Weight : 1.06 pounds Dimensions : 8.25 x 0.58 x 11 inches

2022 0037 | Matching Number in Neutrosophic Graphs Amazon

- ASIN : B09W7FT8GM Publisher : Independently published (March 22, 2022) Language : English Paperback : 153 pages ISBN-13 : 979-8437529676 Item Weight : 1.03 pounds Dimensions : 8.5 x 0.36 x 11 inches
- ASIN : B09W4HF99L Publisher : Independently published (March 22, 2022) Language : English Hardcover : 153 pages ISBN-13 : 979-8437539057 Item Weight : 1 pounds Dimensions : 8.25 x 0.55 x 11 inches

2022 0036 | Clique Number in Neutrosophic Graph Amazon

- ASIN : B09TV82Q7T Publisher : Independently published (March 7, 2022) Language : English Paperback : 155 pages ISBN-13 : 979-8428585957 Item Weight : 1.04 pounds Dimensions : 8.5 x 0.37 x 11 inches
- ASIN : B09TZBPWJG Publisher : Independently published (March 7, 2022) Language : English Hardcover : 155 pages ISBN-13 : 979-8428590258 Item Weight : 1.01 pounds Dimensions : 8.25 x 0.56 x 11 inches

2022 0035 | Independence in Neutrosophic Graphs Amazon

- ASIN : B09TF227GG Publisher : Independently published (February 27, 2022) Language : English Paperback : 149 pages ISBN-13 : 979-8424231681 Item Weight : 1 pounds Dimensions : 8.5 x 0.35 x 11 inches
- ASIN : B09TL1LSKD Publisher : Independently published (February 27, 2022) Language : English Hardcover : 149 pages ISBN-13 : 979-8424234187 Item Weight : 15.7 ounces Dimensions : 8.25 x 0.54 x 11 inches

2022 0034 | Zero Forcing Number in Neutrosophic Graphs Amazon

- ASIN : B09SW2YVKB Publisher : Independently published (February 18, 2022) Language : English Paperback : 147 pages ISBN-13 : 979-8419302082 Item Weight : 15.8 ounces Dimensions : 8.5 x 0.35 x 11 inches
- ASIN : B09SWLK7BG Publisher : Independently published (February 18, 2022) Language : English Hardcover : 147 pages ISBN-13 : 979-8419313651 Item Weight : 15.5 ounces Dimensions : 8.25 x 0.54 x 11 inches

2022 0033 | Neutrosophic Quasi-Order Amazon

- ASIN : B09S3RXQ5C Publisher : Independently published (February 8, 2022) Language : English Paperback : 107 pages ISBN-13 : 979-8414541165 Item Weight : 12 ounces Dimensions : 8.5 x 0.26 x 11 inches
- ASIN : B09S232DQH Publisher : Independently published (February 8, 2022) Language : English Hardcover : 107 pages ISBN-13 : 979-8414545446 Item Weight : 11.7 ounces Dimensions : 8.25 x 0.43 x 11 inches

Jan 29, 2022 0032 | Beyond Neutrosophic Graphs E-publishing&Amazon&Google Scholar&UNM

- Beyond Neutrosophic Graphs, E-publishing:
Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United States
ISBN 978-1-59973-725-6
Henry Garrett, (2022). "Beyond Neutrosophic Graphs", Ohio: E-publishing: Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United States. ISBN: 978-1-59973-725-6 (http://fs.unm.edu/BeyondNeutrosophicGraphs.pdf).
- ASIN : B0BBCQJQG5 Publisher : Independently published (August 8, 2022) Language : English Paperback : 257 pages ISBN-13 : 979-8847564885 Item Weight : 1.65 pounds Dimensions : 8.5 x 0.61 x 11 inches
ASIN : B0BBC4BJZ5 Publisher : Independently published (August 8, 2022) Language : English Hardcover : 257 pages ISBN-13 : 979-8847567497 Item Weight : 1.61 pounds Dimensions : 8.25 x 0.8 x 11 inches
E-publishing: Educational Publisher: http://fs.unm.edu/BeyondNeutrosophicGraphs.pdf
UNM: http://fs.unm.edu/BeyondNeutrosophicGraphs.pdf
Google Scholar:https://books.google.com/books?id=cWWkEAAAQBAJ
Paperback: https://www.amazon.com/gp/product/B0BBCQJQG5
Hardcover: https://www.amazon.com/Beyond-Neutrosophic-Graphs-Henry-Garrett/dp/B0BBC4BJZ5

2022 0031 | Neutrosophic Alliances Amazon

- ASIN : B09RB5XLVB Publisher : Independently published (January 26, 2022) Language : English Paperback : 87 pages ISBN-13 : 979-8408627646 Item Weight : 10.1 ounces Dimensions : 8.5 x 0.21 x 11 inches

- ASIN : B09R39MTSW Publisher : Independently published (January 26, 2022) Language : English Hardcover : 87 pages ISBN-13 : 979-8408632459 Item Weight : 9.9 ounces Dimensions : 8.25 x 0.4 x 11 inches

2022 0030 | Neutrosophic Hypergraphs Amazon

- ASIN : B09PMBKVD4 Publisher : Independently published (January 7, 2022) Language : English Paperback : 79 pages ISBN-13 : 979-8797327974 Item Weight : 9.3 ounces Dimensions : 8.5 x 0.19 x 11 inches
- ASIN : B09PP8VZ3D Publisher : Independently published (January 7, 2022) Language : English Hardcover : 79 pages ISBN-13 : 979-8797331483 Item Weight : 9.1 ounces Dimensions : 8.25 x 0.38 x 11 inches

2022 0029 | Collections of Articles Amazon

- -
- ASIN : B09PHHDDQK Publisher : Independently published (January 2, 2022) Language : English Hardcover : 543 pages ISBN-13 : 979-8794267204 Item Weight : 3.27 pounds Dimensions : 8.25 x 1.47 x 11 inches

2022 0028 | Collections of Math Amazon

- -
- ASIN : B09PHBWT5D Publisher : Independently published (January 1, 2022) Language : English Hardcover : 461 pages ISBN-13 : 979-8793793339 Item Weight : 2.8 pounds Dimensions : 8.25 x 1.28 x 11 inches

2022 0027 | Collections of US Amazon

- -
- ASIN : B09PHBT924 Publisher : Independently published (December 31, 2021) Language : English Hardcover : 261 pages ISBN-13 : 979-8793629645 Item Weight : 1.63 pounds Dimensions : 8.25 x 0.81 x 11 inches

2021 0026 | Neutrosophic Chromatic Number Amazon

- ASIN : B09NRD25MG Publisher : Independently published (December 20, 2021) Language : English Paperback : 67 pages ISBN-13 : 979-8787858174 Item Weight : 8.2 ounces Dimensions : 8.5 x 0.16 x 11 inches Language : English
- -

2021 0025 | Simple Ideas Amazon

- ASIN : B09MYTN6NT Publisher : Independently published (December 9, 2021) Language : English Paperback : 45 pages ISBN-13 : 979-8782049430 Item Weight : 6.1 ounces Dimensions : 8.5 x 0.11 x 11 inches
- -

2021 0024 | Neutrosophic Graphs Amazon

- ASIN : B09MYXVNF9 Publisher : Independently published (December 7, 2021) Language : English Paperback : 55 pages ISBN-13 : 979-8780775652 Item Weight : 7 ounces Dimensions : 8.5 x 0.13 x 11 inches
- -

2021 0023 | List Amazon

- ASIN : B09M554XCL Publisher : Independently published (November 20, 2021) Language : English Paperback : 49 pages ISBN-13 : 979-8770762747 Item Weight : 6.4 ounces Dimensions : 8.5 x 0.12 x 11 inches
- -

2021 0022 | Theorems Amazon

- ASIN : B09KDZXGPR Publisher : Independently published (October 28, 2021) Language : English Paperback : 51 pages ISBN-13 : 979-8755453592 Item Weight : 6.7 ounces Dimensions : 8.5 x 0.12 x 11 inches
- -

2021 0021 | Dimension Amazon

- ASIN : B09K2BBQG7 Publisher : Independently published (October 25, 2021) Language : English Paperback : 55 pages ISBN-13 : 979-8753577146 Item Weight : 7 ounces Dimensions : 8.5 x 0.13 x 11 inches
- -

2021 0020 | Beyond The Graph Theory Amazon

- ASIN : B09KDZXGPR Publisher : Independently published (October 28, 2021) Language : English Paperback : 51 pages ISBN-13 : 979-8755453592 Item Weight : 6.7 ounces Dimensions : 8.5 x 0.12 x 11 inches
- -

2021 0019 | Located Heart And Memories Amazon

- ASIN : B09F14PL8T Publisher : Independently published (August 31, 2021) Language : English Paperback : 56 pages ISBN-13 : 979-8468253816 Item Weight : 7 ounces Dimensions : 8.5 x 0.14 x 11 inches
- -

2021 0018 | Number Graphs And Numbers Amazon

- ASIN : B099BQRSF8 Publisher : Independently published (July 14, 2021) Language : English Paperback : 32 pages ISBN-13 : 979-8537474135 Item Weight : 4.8 ounces Dimensions : 8.5 x 0.08 x 11 inches
- -

2021 0017 | First Place Is Reserved Amazon

- ASIN : B098CWD5PT Publisher : Independently published (June 30, 2021) Language : English Paperback : 55 pages ISBN-13 : 979-8529508497 Item Weight : 7 ounces Dimensions : 8.5 x 0.13 x 11 inches
- -

2021 0016 | Detail-oriented Groups And Ideas Amazon

- ASIN : B098CYYG3Q Publisher : Independently published (June 30, 2021) Language : English Paperback : 69 pages ISBN-13 : 979-8529401279 Item Weight : 8.3 ounces Dimensions : 8.5 x 0.17 x 11 inches
- -

2021 0015 | Definition And Its Necessities Amazon

- ASIN : B098DHRJFD Publisher : Independently published (June 30, 2021) Language : English Paperback : 79 pages ISBN-13 : 979-8529321416 Item Weight : 9.3 ounces Dimensions : 8.5 x 0.19 x 11 inches
- -

2021 0014 | Words And Their Directionss Amazon

- ASIN : B098CYS8G2 Publisher : Independently published (June 30, 2021) Language : English Paperback : 65 pages ISBN-13 : 979-8529393758 Item Weight : 8 ounces Dimensions : 8.5 x 0.16 x 11 inches
- -

2021 0013 | Tattooed Heart But Forever Amazon

- ASIN : B098CR8HM6 Publisher : Independently published (June 30, 2021) Language : English Paperback : 45 pages ISBN-13 : 979-8728873891 Item Weight : 6.1 ounces Dimensions : 8.5 x 0.11 x 11 inches
- -

2021 0012 | Metric Number In Dimension Amazon

- ASIN : B0913597TV Publication date : March 24, 2021 Language : English File size : 28445 KB Text-to-Speech : Enabled Enhanced typesetting : Enabled X-Ray : Not Enabled Word Wise : Not Enabled Print length : 48 pages Lending : Not Enabled Kindle
- -

2021 0011 | Domination Theory And Beyond Amazon

- ASIN : B098DMMZ87 Publisher : Independently published (June 30, 2021) Language : English Paperback : 188 pages ISBN-13 : 979-8728100775 Item Weight : 1.23 pounds Dimensions : 8.5 x 0.45 x 11 inches
- -

2021 0010 | Vital Glory Amazon

- ASIN : B08PVNJYRM Publication date : December 6, 2020 Language : English File size : 1544 KB Simultaneous device usage : Unlimited Text-to-Speech : Enabled Screen Reader : Supported Enhanced typesetting : Enabled X-Ray : Not Enabled Word Wise : Enabled Print length : 24 pages Lending : Enabled Kindle
- -

2021 0009 | Análisis de modelos y orientación más allá AmazonUK&MoreBooks

- Análisis de modelos y orientación más allá Planteamiento y problemas en dos modelos Ediciones Nuestro Conocimiento (2021-04-06) eligible for voucher ISBN-13: 978-620-3-59902-2 ISBN-10:6203599026EAN:9786203599022Book language:Blurb/Shorttext:El enfoque para la resolución de problemas es una selección obvia para hacer la investigación y el análisis de la situación que puede provocar las perspectivas vagas que queremos no ser para extraer ideas creativas y nuevas que queremos ser. Estudio simultáneamente dos modelos. Este estudio se basa tanto en la investigación como en la discusión que el autor piensa que puede ser útil para entender y hacer crecer nuestra fantasía y la realidad juntas.Publishing house: Ediciones Nuestro Conocimiento Website: https://sciencia-scripts.com By (author) : Henry Garrett Number of pages:64Published on:2021-04-06Stock:Available Category: Mathematics Price:39.90 Keywords:Dos modelos, optimización de rutas y transporte, Two Models, Optimizing Routes and Transportation
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https://www.morebooks.shop/store/gb/book/análisis-de-modelos-y-orientación-más-allá/isbn/978-620-3-59902-2
- Product details Publisher : Ediciones Nuestro Conocimiento (6 April 2021) Language : Spanish ISBN-10 : 6203599026 ISBN-13 : 978-6203599022 Dimensions : 15 x 0.4 x 22 cm
Paperback:
https://www.amazon.co.uk/Análisis-modelos-orientación-allá-Planteamiento/dp/6203599026

2021 0008 | Анализ моделей и руководство за пределами Amazon&MoreBooks

› Анализ моделей и руководство за пределами Подход и проблемы в двух моделях Sciencia Scripts (2021-04-06) eligible for voucher ISBN-13: 978-620-3-59908-4 ISBN-10:6203599085EAN:9786203599084Book language: Russian Blurb/Shorttext:Подход к решению проблем является очевидным выбором для проведения исследований и анализа ситуации, которая может вызвать смутные перспективы, которыми мы не хотим быть для извлечения творческих и новых идей, которыми мы хотим быть. Я одновременно изучаю две модели. Это исследование основано как на исследовании, так и на обсуждении, которое, по мнению автора, может быть полезным для понимания и развития наших фантазий и реальности вместе.Publishing house: Sciencia Scripts Website: https://sciencia-scripts.com By (author) : Генри Гарретт Number of pages:68Published on:2021-04-06Stock:Available Category: Mathematics Price:39.90 Keywords:Две модели, оптимизация маршрутов и транспорта, Two Models, Optimizing Routes and Transportation
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https://www.morebooks.shop/store/gb/book/анализ-моделей-и-руководство-за-пределами/isbn/978-620-3-59908-4

› Анализ моделей и руководство за пределами: Подход и проблемы в двух моделях (Russian Edition) Publisher : Sciencia Scripts (April 6, 2021) Language : Russian Paperback : 68 pages ISBN-10 : 6203599085 ISBN-13 : 978-6203599084 Item Weight : 5.3 ounces Dimensions : 5.91 x 0.16 x 8.66 inches

2021 0007 | Análise e Orientação de Modelos Além Amazon | MoreBooks | Walmart

› Análise e Orientação de Modelos Além Abordagem e Problemas em Dois Modelos Edições Nosso Conhecimento (2021-04-06) eligible for voucher ISBN-13: 978-620-3-59907-7 ISBN-10:6203599077EAN:9786203599077Book language:Blurb/Shorttext:A abordagem para resolver problemas é uma seleção óbvia para fazer pesquisa e análise da situação, que pode trazer as perspectivas vagas que queremos não ser para extrair idéias criativas e novas idéias que queremos ser. Eu estudo simultaneamente dois modelos. Este estudo é baseado tanto na pesquisa como na discussão que o autor pensa que pode ser útil para compreender e fazer crescer juntos a nossa fantasia e realidade.Publishing house: Edições Nosso Conhecimento Website: https://sciencia-scripts.com By (author) : Henry Garrett Number of pages:64Published on:2021-04-06Stock:Available Category: Mathematics Price:39.90 Keywords:Dois Modelos, Otimização de Rotas e Transporte, Two Models, Optimizing Routes and Transportation
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https://www.morebooks.shop/store/gb/book/análise-e-orientação-de-modelos-além/isbn/978-620-3-59907-7
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Language Portuguese Publisher KS Omniscriptum Publishing Book Format Paperback Number of Pages 64 Author Henry Garrett Title Análise e Orientação de Modelos Além ISBN-13 9786203599077 Publication Date April, 2021 Assembled Product Dimensions (L x W x H) 9.00 x 6.00 x 1.50 Inches ISBN-10 6203599077 Walmart

› Análise e Orientação de Modelos Além: Abordagem e Problemas em Dois Modelos (Portuguese Edition) Publisher : Edições Nosso Conhecimento (April 6, 2021) Language : Portuguese Paperback : 64 pages ISBN-10 : 6203599077 ISBN-13 : 978-6203599077 Item Weight : 3.67 ounces Dimensions : 5.91 x 0.15 x 8.66 inches

2021 0006 | Analizy modelowe i wytyczne wykraczające poza Amazon&MoreBooks

› Analizy modelowe i wytyczne wykraczające poza Podejście i problemy w dwóch modelach Wydawnictwo Nasza Wiedza (2021-04-06) eligible for voucher ISBN-13: 978-620-3-59906-0 ISBN-10:6203599069EAN:9786203599060Book language:Blurb/Shorttext:Podejście do rozwiązywania problemów jest oczywistym wyborem do prowadzenia badań i analizowania sytuacji, które mogą wywoływać niejasne perspektywy, których nie chcemy dla wydobycia kreatywnych i nowych pomysłów, które chcemy. I jednocześnie studiować dwa modele. Badanie to oparte jest zarówno na badaniach jak i dyskusji, które zdaniem autora mogą być przydatne do zrozumienia i rozwoju naszych fantazji i rzeczywistości razem.Publishing house: Wydawnictwo Nasza Wiedza Website: https://sciencia-scripts.com By (author) : Henry Garrett Number of pages:64Published on:2021-04-06Stock:Available Category: Mathematics Price:39.90 Keywords:Dwa modele, optymalizacja tras i transportu, Two Models, Optimizing Routes and Transportation
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https://www.morebooks.shop/store/gb/book/analizy-modelowe-i-wytyczne-wykraczające-poza/isbn/978-620-3-59906-0

› Analizy modelowe i wytyczne wykraczające poza: Podejście i problemy w dwóch modelach (Polish Edition) Publisher : Wydawnictwo Nasza Wiedza (April 6, 2021) Language : Polish Paperback : 64 pages ISBN-10 : 6203599069 ISBN-13 : 978-6203599060 Item Weight : 3.67 ounces Dimensions : 5.91 x 0.15 x 8.66 inches

2021 0005 | Modelanalyses en begeleiding daarna Amazon&MoreBooks

› Modelanalyses en begeleiding daarna Aanpak en problemen in twee modellen Uitgeverij Onze Kennis (2021-04-06) eligible for voucher ISBN-13: 978-620-3-59905-3 ISBN-10:6203599050EAN:9786203599053Book language:Blurb/Shorttext:De aanpak voor het oplossen van problemen is een voor de hand liggende keuze voor het doen van onderzoek en het analyseren van de situatie die de vage perspectieven kan oproepen die we niet willen zijn voor het extraheren van creatieve en nieuwe ideeën die we willen zijn. Ik bestudeer tegelijkertijd twee modellen. Deze studie is gebaseerd op zowel onderzoek als discussie waarvan de auteur denkt dat ze nuttig kunnen zijn voor het begrijpen en laten groeien van onze fantasieën en de werkelijkheid samen.Publishing house: Uitgeverij Onze Kennis Website: https://sciencia-scripts.com By (author) : Henry Garrett Number of pages:64Published on:2021-04-06Stock:Available Category: Mathematics Price:39.90 Keywords:Twee modellen, optimalisering van routes en transport, Two Models, Optimizing Routes and Transportation
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› Modelanalyses en begeleiding daarna: Aanpak en problemen in twee modellen (Dutch Edition) Publisher : Uitgeverij Onze Kennis (April 6, 2021) Language : Dutch Paperback : 64 pages ISBN-10 : 6203599050 ISBN-13 : 978-6203599053 Item Weight : 3.99 ounces Dimensions : 5.91 x 0.15 x 8.66 inches

2021 0004 | Analisi dei modelli e guida oltre Amazon | MoreBooks | Walmart

➧ Analisi dei modelli e guida oltre Approccio e problemi in due modelli Edizioni Sapienza (2021-04-06) eligible for voucher ISBN-13: 978-620-3-59904-6 ISBN-10:6203599042EAN:9786203599046Book language:Blurb/Shorttext:L'approccio per risolvere i problemi è una selezione ovvia per fare ricerca e analisi della situazione che può suscitare le prospettive vaghe che non vogliamo essere per estrarre idee creative e nuove che vogliamo essere. Studio contemporaneamente due modelli. Questo studio si basa sia sulla ricerca che sulla discussione che l'autore pensa possa essere utile per capire e far crescere insieme la nostra fantasia e la realtà.Publishing house: Edizioni Sapienza Website: https://sciencia-scripts.com By (author) : Henry Garrett Number of pages:60Published on:2021-04-06Stock:Available Category: Mathematics Price:39.90 Keywords:Due modelli, ottimizzazione dei percorsi e del trasporto, Two Models, Optimizing Routes and Transportation
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L'approccio per risolvere i problemi è una selezione ovvia per fare ricerca e analisi della situazione che può suscitare le prospettive vaghe che non vogliamo essere per estrarre idee creative e nuove che vogliamo essere. Studio contemporaneamente due modelli. Questo studio si basa sia sulla ricerca che sulla discussione che l'autore pensa possa essere utile per capire e far crescere insieme la nostra fantasia e la realtà. Analisi dei modelli e guida oltre (Paperback) We aim to show you accurate product information. Manufacturers, suppliers and others provide what you see here, and we have not verified it. See our disclaimer Specifications
Publisher KS Omniscriptum Publishing Book Format Paperback Number of Pages 60 Author Henry Garrett Title Analisi dei modelli e guida oltre ISBN-13 9786203599046 Publication Date April, 2021 Assembled Product Dimensions (L x W x H) 9.00 x 6.00 x 1.50 Inches ISBN-10 6203599042 Walmart

➧ Analisi dei modelli e guida oltre: Approccio e problemi in due modelli (Italian Edition) Publisher : Edizioni Sapienza (April 6, 2021) Language : Italian Paperback : 60 pages ISBN-10 : 6203599042 ISBN-13 : 978-6203599046 Item Weight : 3.53 ounces Dimensions : 5.91 x 0.14 x 8.66 inches

2021 0003 | Analyses de modèles et orientations au-delà Amazon | MoreBooks | Walmart

➧ Analyses de modèles et orientations au-delà Approche et problèmes dans deux modèles Editions Notre Savoir (2021-04-06) eligible for voucher eligible for voucher ISBN-13: 978-620-3-59903-9 ISBN-10:6203599034EAN:9786203599039Book language: French Blurb/Shorttext:L'approche pour résoudre les problèmes est une sélection évidente pour faire la recherche et l'analyse de la situation qui peut éliciter les perspectives vagues que nous ne voulons pas être pour extraire des idées créatives et nouvelles que nous voulons être. J'étudie simultanément deux modèles. Cette étude est basée à la fois sur la recherche et la discussion, ce qui, selon l'auteur, peut être utile pour comprendre et développer nos fantasmes et la réalité ensemble.Publishing house: Editions Notre Savoir Website: https://sciencia-scripts.com By (author) : Henry Garrett Number of pages:64Published on:2021-04-06Stock:Available Category: Mathematics Price:39.90 Keywords:Two Models, Optimizing Routes and Transportation, Deux modèles, optimisation des itinéraires et des transports
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Language French Publisher KS Omniscriptum Publishing Book Format Paperback Number of Pages 64 Author Henry Garrett Title Analyses de modèles et orientations au-delà ISBN-13 9786203599039 Publication Date April, 2021 Assembled Product Dimensions (L x W x H) 9.00 x 6.00 x 1.50 Inches ISBN-10 6203599034 Walmart

➧ Analyses de modèles et orientations au-delà: Approche et problèmes dans deux modèles (French Edition) Publisher : Editions Notre Savoir (April 6, 2021) Language : French Paperback : 64 pages ISBN-10 : 6203599034 ISBN-13 : 978-6203599039 Item Weight : 3.67 ounces Dimensions : 5.91 x 0.15 x 8.66 inches

2021 0002 | Modell-Analysen und Anleitungen darüber hinaus Amazon | MoreBooks | Walmart | eBay

- eligible for voucher ISBN-13: 978-620-3-59901-5 ISBN-10:6203599018EAN:9786203599015Book language: German Blurb/Shorttext:Die Herangehensweise zur Lösung von Problemen ist eine offensichtliche Auswahl für die Forschung und Analyse der Situation, die die vagen Perspektiven, die wir nicht sein wollen, für die Extraktion von kreativen und neuen Ideen, die wir sein wollen, hervorbringen kann. Ich studiere gleichzeitig zwei Modelle. Diese Studie basiert sowohl auf der Forschung als auch auf der Diskussion, von der der Autor denkt, dass sie für das Verständnis und das Zusammenwachsen unserer Fantasie und Realität nützlich sein kann.Publishing house: Verlag Unser Wissen Website: https://sciencia-scripts.com By (author) : Henry Garrett Number of pages:68Published on:2021-04-06Stock:Available Category: Mathematics Price:39.90 Keywords:Zwei Modelle, Optimierung von Routen und Transport, Two Models, Optimizing Routes and Transportation
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Language German Publisher KS Omniscriptum Publishing Book Format Paperback Number of Pages 68 Author Henry Garrett Title Modell-Analysen und Anleitungen darüber hinaus ISBN-13 9786203599015 Publication Date April, 2021 Assembled Product Dimensions (L x W x H) 9.00 x 6.00 x 1.50 Inches ISBN-10 6203599018
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Seller assumes all responsibility for this listing. Item specifics Condition: New: A new, unread, unused book in perfect condition with no missing or damaged pages. See the ... Read moreabout the condition ISBN: 9786203599015 EAN: 9786203599015 Publication Year: 2021 Type: Textbook Format: Paperback Language: German Publication Name: Modell-Analysen Und Anleitungen Daruber Hinaus Item Height: 229mm Author: Henry Garrett Publisher: Verlag Unser Wissen Item Width: 152mm Subject: Mathematics Item Weight: 113g Number of Pages: 68 Pages About this product Product Information Die Herangehensweise zur Loesung von Problemen ist eine offensichtliche Auswahl fur die Forschung und Analyse der Situation, die die vagen Perspektiven, die wir nicht sein wollen, fur die Extraktion von kreativen und neuen Ideen, die wir sein wollen, hervorbringen kann. Ich studiere gleichzeitig zwei Modelle. Diese Studie basiert sowohl auf der Forschung als auch auf der Diskussion, von der der Autor denkt, dass sie fur das Verstandnis und das Zusammenwachsen unserer Fantasie und Realitat nutzlich sein kann. Product Identifiers Publisher Verlag Unser Wissen ISBN-13 9786203599015 eBay Product ID (ePID) 11049032082 Product Key Features Publication Name Modell-Analysen Und Anleitungen Daruber Hinaus Format Paperback Language German Subject Mathematics Publication Year 2021 Type Textbook Author Henry Garrett Number of Pages 68 Pages Dimensions Item Height 229mm Item Width 152mm Item Weight 113g Additional Product Features Title_Author Henry Garrett
eBay
- Modell-Analysen und Anleitungen darüber hinaus: Ansatz und Probleme in zwei Modellen (German Edition) Publisher : Verlag Unser Wissen (April 6, 2021) Language : German Paperback : 68 pages ISBN-10 : 6203599018 ISBN-13 : 978-6203599015 Item Weight : 3.99 ounces Dimensions : 5.91 x 0.16 x 8.66 inches Paperback

2021 0001 | Model Analyses and Guidance Beyond Amazon&MoreBooks

➤ Model Analyses and Guidance Beyond Approach and Problems in Two Models LAP LAMBERT Academic Publishing (2020-12-02) eligible for voucher ISBN-13: 978-620-3-19506-4 ISBN-10:6203195065EAN:9786203195064Book language: English Blurb/Shorttext:Approach for solving problems is an obvious selection for doing research and analysis the situation which may elicit the vague perspectives which we want not to be for extracting creative and new ideas which we want to be. I simultaneously study two models. This study is based both research and discussion which the author thinks that may be useful for understanding and growing our fantasizing and reality together.Publishing house: LAP LAMBERT Academic Publishing Website: https://www.lap-publishing.com/ By (author) : Henry Garrett Number of pages:52Published on:2020-12-02Stock:Available Category: Mathematics Price:39.90 Keywords:Two Models, Optimizing Routes and Transportation
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➤ Model Analyses and Guidance Beyond: Approach and Problems in Two Models Publisher : LAP LAMBERT Academic Publishing (December 2, 2020) Language : English Paperback : 52 pages ISBN-10 : 6203195065 ISBN-13 : 978-6203195064 Item Weight : 3.39 ounces Dimensions : 5.91 x 0.12 x 8.66 inches

Participating in Seminars

I've participated in all virtual conferences which are listed below [Some of them without selective process].

–https://web.math.princeton.edu/ pds/onlinetalks/talks.html
. . .

Also, I've participated in following events [Some of them without selective process]:

-The Hidden NORMS seminar
-Talk Math With Your Friends (TMWYF)
-MATHEMATICS COLLOQUIUM: https://www.csulb.edu/mathematics-statistics/mathematics-colloquium
-Lathisms: Cafe Con Leche
-Big Math network
. . .

I'm in mailing list in following [Some of them without selective process] organizations:

-[Algebraic-graph-theory] AGT Seminar (lists-uwaterloo-ca)
-Combinatorics Lectures Online (https://web.math.princeton.edu/ pds/onlinetalks/talks.html)
-Women in Combinatorics
-CMSA-Seminar (unsw-au)
-OURFA2M2 Online Undergraduate Resource Fair for the Advancement and Alliance of Marginalized Mathematicians
...

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Social Accounts

I've listed my accounts below.

-My website [Covering all my contributions containing articles and books as free access to download with PDF extension and more]: https://drhenrygarrett.wordpress.com

-Amazon [Some of my all books, here]: https://www.amzn.com/author/drhenrygarrett

-Twitter: @DrHenryGarrett (www.twitter.com/DrHenryGarrett)

– ResearchGate: https://www.researchgate.net/profile/Henry-Garrett-2

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$- LinkedIn : https : //www.linkedin.com/in/drhenrygarrett/$

References

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Mathematician | Author | Scientist | Puzzler | Main Account is in Twitter: @DrHenryGarrett (www.twitter.com/DrHenryGarrett) | Amazon: https://www.amazon.com/author/drhenrygarrett | Website: DrHenryGarrett.wordpress.com

In this research book, there are some research chapters on [redacted] researches on the basic properties, the research book starts to make [redacted] more understandable.

Some studies and researches about neutrosophic graphs, are proposed as book in the following by Henry Garrett (2022) which is indexed by Google Scholar and has more than 2498 readers in Scribd. It's titled "Beyond Neutrosophic Graphs" and published by Ohio: E-publishing: Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United State. This research book covers different types of notions and settings in neutrosophic graph theory and neutrosophic SuperHyperGraph theory.

[Ref] Henry Garrett, (2022). "Beyond Neutrosophic Graphs", Ohio: E-publishing: Educational Publisher 1091 West 1st Ave Grandview Heights, Ohio 43212 United States. ISBN: 978-1-59973-725-6 (http://fs.unm.edu/BeyondNeutrosophicGraphs.pdf).

Also, some studies and researches about neutrosophic graphs, are proposed as book in the following by Henry Garrett (2022) which is indexed by Google Scholar and has more than 3218 readers in Scribd. It's titled "Neutrosophic Duality" and published by Florida: GLOBAL KNOWLEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. This research book presents different types of notions SuperHyperResolving and SuperHyperDominating in the setting of duality in neutrosophic graph theory and neutrosophic SuperHyperGraph theory. This research book has scrutiny on the complement of the intended set and the intended set, simultaneously. It's smart to consider a set but acting on its complement that what's done in this research book which is popular in the terms of high readers in Scribd.

[Ref] Henry Garrett, (2022). "Neutrosophic Duality", Florida: GLOBAL KNOW- LEDGE - Publishing House 848 Brickell Ave Ste 950 Miami, Florida 33131 United States. ISBN: 978-1-59973-743-0 (http://fs.unm.edu/NeutrosophicDuality.pdf).