

Gravitational Coupling Constant as a Combination of Three Distinct Couplings

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Abstract:

This paper will analyze the coupling constant of gravity using the coupling constant equation and the new 8-theory framework. Analysis of the nature of gravity will be examined in two ways. First, as an independent interaction and the second option as a combination of several interactions. Reader is assumed to have read the thesis of the theory. Familiarity is required. The analysis is made via the second representation of the coupling constant equation, spin and the prime critical line.

Introduction

$$F_R \# = \left(8 * \prod_{i=1}^{i=R} N(V)_i + (3) \right) + N(V)_i = 9: 30: 128: 850: 9254.. \quad (1)$$

$$N(V)_i = 2 \left(V + \frac{1}{2} \right); \quad V \geq 0$$

$$N(V)_i \in \mathbb{P} \bigoplus (+1); \quad \mathbb{P} \rightarrow \text{Set of Primes}$$

$$N(V)_i = P_{max} \text{ in Range } [0, \mathbb{R}]$$

Represent the equation in the form:

$$F_R \# = \left(8 * \prod_{i=1}^{i=R} N(V)_i + (3) \right) + N(V)_i = 1: \frac{1}{30}: \frac{1}{128}: \frac{1}{850}: \frac{1}{9254} \dots \quad (2)$$

Analyze the third element – Electromagnetism:

$$[(24 * 5) + (3)] + 5 \quad (3)$$

$$[(24 * 5) + (3)] + 5 \rightarrow \left[2N^2 + \frac{1}{2}\right] + \frac{1}{2} \quad (4)$$

$(2N \text{ variations}) \rightarrow \text{Spin } 0$

$(2N \text{ variations} + 3) \rightarrow \text{Matter with spin } (1/2)$

$(2N \text{ variations} + 3) + N(V) \rightarrow \text{Bosons with spin } (1)$

$(2N \text{ variations} + 3) + N(V1) + N(V2) + \dots \rightarrow \text{Boson with higher spin integers}$

Given that framework, we can vividly see that gravity is belonging to the bosons with Higher spin integers, as modern theories predict the gravitational interaction to have Spin two. In the 8-theory framework, what does it mean? In the context of the coupling Constant equation what does it mean?

Since it has spin 2, we can associate gravity to the category:

$(2N \text{ variations} + 3) + N(V1) + N(V2) + \dots \rightarrow \text{Boson with higher spin integers}$

Which could relate to a certain combination of elements in the coupling constant Series, as the elements are getting weaker and weaker, if the gravitational coupling will Not be found by keeping developing to infinity it could mean **gravitational will be found As a combination of elements in the series**. Since it is spin 2 there should be three net Variations outside:

Gravitation as a combination of elements, using the fact it has a boson with spin 2.

$$[(2N(g)) + (3)] + N(V) + N(V') + N(V'') \rightarrow \left[2N^2 + \frac{1}{2}\right] + \frac{1}{2} + \frac{1}{2} + \frac{1}{2} =$$

$$[2N(g) + 2] \quad (5)$$

Using the second representation of the coupling constant equation, meaning spin. It also means that the gravitational is a lot rarer as it is requiring a combination of elements in the series to be emitted and not just a singular element.

Certain analogy comes to mind, putting a combination of numbers in a lottery ticket. The more required the less chances to get it right. That might come to an agreement with the reason we were not able to detect the graviton up to this day.

In this paper, one suggested an additional option to nature of gravity using the feature of its spin. In this framework, spin 2 means a certain combination of elements in the Coupling constant series. Such combination is making the graviton a lot more rare and Hard to detect. The analysis was done via the second representation of the coupling Constant equation, the prime critical line.

References

O. Manor. "The 8- Theory – The Theory of Everything" In: (2021)