8 Theory Indicate – Same Set of Rules Applies to all Distinct Universes.

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Abstract:

By using the new framework of the 8-theory and the recent insights about the principles governing it, an analysis of a stationary distinct universe will be made. The result is an astonishing conclusion, the same rules applies to all distinct universes, which could be of course at different stages of development. By same rules we mean, families and coupling constants of the same magnitude, same amount of cosmological flatness overtime, same large structure at different distributions and densities.

Introduction

In the 8-theory, there are three main equations, the first describes a Lorentz manifold required to be stationary. Such a manifold described by equation (1). Given no data available from the first three terms we require than the last two terms to be equal to zero. That requirement leading to extremum areas on the manifold which stay as they are over time, to be equal to time invariant Ricci flow acceleration, which can not affect them. Exactly as described by the so called to "dark energy".

$$\frac{\partial \mathrm{L}}{\partial \mathrm{s}}\frac{\partial \mathrm{s}}{\partial \mathrm{M}}\frac{\partial \mathrm{M}}{\partial \mathrm{g}}\frac{\partial \mathrm{g}}{\partial \mathrm{t}} - \frac{\partial \mathrm{L}}{\partial \mathrm{s}'}\frac{\partial \mathrm{s}'}{\partial \mathrm{M}}\frac{\partial \mathrm{M}}{\partial \mathrm{g}'}\frac{\partial^2 g'}{\partial \mathrm{t}^2} = 0 \qquad (1)$$

$$\left[\frac{\partial L}{\partial s}\frac{\partial s}{\partial M}\frac{\partial M}{\partial g}\right]\frac{\partial g}{\partial t}\delta g - \left[\frac{\partial L}{\partial s'}\frac{\partial s'}{\partial M}\frac{\partial M}{\partial g'}\right]\frac{\partial \partial g'}{\partial \partial t}\delta g' = 0 \qquad (2)$$

In the thesis, it was proven that the manifold experience arbitrary variations, which vanish into matter. That was done by requiring $\delta g = 0$ and then breaking it to a sequence of sub elements. We concluded the set to have only two distinct elements, appear in even amount and the two elements differ in sign. Similar to fermions in the quantum field theory framework.

Equation (1) can be represented in a beautiful way. Assuming there is more than one stationary Lorentz manifold, again in agreement with quantum field theory regarding the number of universes. We built the following representation:

$$\frac{\partial L}{\partial s1}\frac{\partial s1}{\partial M(1)}\frac{\partial M(1)}{\partial g}\frac{\partial g}{\partial t} - \sum_{n=1}^{\infty}\frac{\partial L}{\partial s(n)}\frac{\partial s(n)}{\partial M(n)}\frac{\partial M(n)}{\partial g}\frac{\partial g}{\partial t} = 0 \qquad (3)$$

So the manifolds are wrapping one another and causing the matric of each to accelerate outward. Those manifolds are topologically invariant, last term in each manifold is equal to zero. The matric of course is different, so if we could switch to a different manifold exactly above earth, there is no guarantee that there will be anything similar to it in the interfacing closest manifold. It is very unlikely. The second rule is an axiom, the manifold experience net variations, which can not vanish. They are prime. Each prime amount of net variation than leading to a propagation of a boson. The construction we built is similar to all the manifolds. In particular, the magnitudes which each manifold will experience will be the same. The reason for it is given by equation (1) and the condition $\delta g = 0$ leading to the construction of fermions.

$$F_{V=0} = 8 + (1) \tag{4}$$

$$F_R\# = \left(8 * \prod_{V=1}^{V=R} N_V + (3)\right) + N_V = 30{:}\,128{:}\,850{:}\,9254.. \tag{5}$$

$$N_V = 2\left(V + \frac{1}{2}\right);\ \ V \geq 0 \tag{6}$$

$$N_V \in \mathbb{P} \ \cup \ (+1)\,; \quad \mathbb{P} \rightarrow Set\ of\ Primes$$

$$N_V = P_{max} \in [0, \mathbb{R}] \ \cup \ (+1)\ ;\ P_{max} \in \mathbb{P}$$

$$8 + (1){:}\,\big(24 + (3)\big) + 3{:}\,\big(120 + (3)\big) + 5{:}\,\big(840 + (3)\big) + 7 \ldots \tag{7}$$

$$(1){:}\,(30){:}\,(128){:}\,(850){:}\,(9254)\ \ldots \tag{8}$$

The difference would be with the relative stage of development of the manifold. The younger the manifold the stronger the interactions it will experience. In addition, by the third representation of the arrow, as the manifold time continuation it will experience weaker and weaker interactions at larger scale. All the universes obey those two rules, and it is testable, given by two axioms:

(7) **Axiom 1**: The universes are Lorentzian manifolds

(8) **Axiom 2**: Those manifolds are required to be stationary.

The last rule is the most elusive one. The manifold will experience arbitrary variation converging inward, these are masses. Each generation of masses can be derived by devising the total mass of the previous generation. The result is an endless succession of families converging to zero very rapidly. In the 8-theory we predict the next family to form below first generation at total mass 0.113 Mev. There is no indication that in a stationary distinct manifold such masses accrue, unless we require another axiom:

(9) **Axiom 3**: Each generation total mass is a result of a division of the total mass of the previous generation.

Than by Axiom 3, we could have something similar to our own masses, but not necessarily, it depends upon the value of the first family. The idea is the same, nature is eliminating the arbitrary variations by devising in increasing amounts, but are the masses the same in all the universes? If the division is by even amounts and we have the $8-(1)$ pattern, than those two conditions are imposing limits, just like the symmetry imposes limit on the laws of physics in physical theories, than it is very likely that the masses are the same as not any values of elements to yield total mass that can be divided by an even sum of a certain magnitude to yield another total mass and so on. If reader have not read the thesis than it would be hard to grasp what one has written in this paragraph. Simpler way to state it, the masses pattern imposes limit on the values. So we have two axioms, yielding two equations, and these are the laws of all the universes in our framework.

$$\left[\frac{\partial L}{\partial s}\frac{\partial s}{\partial M}\frac{\partial M}{\partial g}\right]\frac{\partial g}{\partial t}\delta g-\left[\frac{\partial L}{\partial s'}\frac{\partial s'}{\partial M}\frac{\partial M}{\partial g'}\right]\frac{\partial\partial g'}{\partial\partial t}\delta g'=0 \qquad (0)$$

$$F_{V=0}=8+(1) \qquad (1.0)$$

$$F_R\#=\left(8*\prod_{V=1}^{V=R}N_V+(3)\right)+N_V=30:128:850:9254.. \qquad (2)$$

References

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