

A Heuristic Viewpoint Concerning String Theory As A Hologram

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Abstract: I would like to describe an idea which to me appears to be in direct correlation with the Holographic Principle as well as Einstein's cosmological constant. In essence the suggestion will be to inspire the notion that Einstein's constant is a deliberate manifestation from resonating neatly stacked, topologically Conjugated and embedded fields set on a Higgs platform utilizing a projected "Bosonic holographic Closed String Theory" as its cosmological skeletal structure. In addition an introduction to a Holographic Skeletal Modular Function known as the "EMMITT" that appears to be demanded in "The Holographic Principle" as well as Quantum Gravitation will be given.

Index Terms: Gravitation, Black Holes, String Theory, Higgs Strings, Holographic Principle, Einstein's Constant, Emmitt theory, Topological.

1: INTRODUCTION

It has been suggested that one of the most challenging questions in Theoretical Cosmological Evolution today is that of The Vacuum Energy Density; or Einstein's Cosmological Constant as it pertains to its small value. [10][7]

$$2.28 \times 10^{-35} \text{ s}^{-2}$$

Yet few have added that any mechanism capable of producing such a "seemingly" small yet energy enriched constant; along with it possibly being enigmatically linked to "Holographic Universal Projection"; should also be able to utilize than cancel multiple energy resources' whilst still remaining perpetually efficient; self-sustaining; self-generating; and completely independent of any requirement for a background[7]. A holographic cosmological Turing Machine.

II: The Cosmological Term as an assigned Universal value

Albert Einstein's 1917 introduction of his Constant term to his already miraculous field equations, where his constant Λ

$$R_{\mu\nu} - \frac{1}{2}Rg_{\mu\nu} + \Lambda g_{\mu\nu} = \frac{8\pi G}{c^4}T_{\mu\nu}$$

Was originally suggested to add the notion of a static non expanding universe .Than when Edwin Hubble showed observationally that indeed our universe was expanding, Einstein is said to have stated during a conversation with George Gamow that the introduction of his new term Λ was his biggest blunder.

Yet if indeed our cosmological environment is nothing more than a frequency depicting holographic string vibrations, than there is a possibility that Einstein's constant could very well be his most remarkable discovery. Emmitt Theory implies that Einstein's constant actually takes the form of

$$e g^{/l - (K)} = \Lambda$$

Where $(K) = f(A)_{K/(J_K)}$ IISII

g is equal to the string coupling constant and $/l$ is a Spin field cosmological quilting operator, While $(K) =$ the sum of the string knot state summation over the number of loops in the state IISII, and Λ is Einstein's incredible constant or our assigned vacuum energy density according to the theory; introducing $f(A)$ as a "Higgs string knot link diagram" that seems to be invariant under Reidmeister moves; embracing (J_K) as the Jones polynomial taken over the state summation space, utilizing Gausses' permutation functor q allowing N to reflect the number of degrees of freedom in a Higgs string state. or $(J_K) = (-1)^{-N} q^{+N-2-N}(K)$ Now because we are assuming Strings, depicted here as $X^{J(K)}$ to be of a Holographic nature; their products aren't treated in the usual manner as we are accustomed to in the multiplication with natural numbers; instead we see that with the holographic string their products stem from field permutations on Braid Groups using non-associative algebraic structures interestingly named Topological Quandles & Racks. [17]

Where a **rack** may be defined as a set R with a binary operation \triangleleft such that for every $a, b, c \in R$ the **self-distributive law** holds:

$$a \triangleleft (b \triangleleft c) = (a \triangleleft b) \triangleleft (a \triangleleft c)$$

and for every $a, b \in R$ there exists a unique $c \in R$ such that

$$a \triangleleft c = b$$

We then have

$$a \triangleleft c = b \iff c = b \triangleright a$$

and thus

$$a \triangleleft (b \triangleright a) = b$$

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And

$$(a \triangleleft b) \triangleright a = b$$

Using this idea, a rack may be equivalently defined as a set R with two binary operations \triangleleft and \triangleright such that for all $a, b, c \in R$:

$$a \triangleleft (b \triangleleft c) = (a \triangleleft b) \triangleleft (a \triangleleft c)$$

$$(c \triangleright b) \triangleright a = (c \triangleright a) \triangleright (b \triangleright a)$$

$$(a \triangleleft b) \triangleright a = b$$

$$a \triangleleft (b \triangleright a) = b$$

a **rack** may be defined as a set R with a binary operation $e \triangleright$ such that for every a, b , elements of R the **Self-distributive laws [17]** Hold and may be applied perfectly on String "self-distribution operations" where it appears that the holographic entropy distribution on the Higgs compactified fields or string in addition to a "Left" and "Right" distribution, also adheres to an "Up" and "Down" vibration as well. While a Quandle is defined as a rack, Q , such that $\forall a \in Q$

$$a \triangleleft a = a$$

or equivalently

$$a \triangleright a = a$$

Suggesting a (Left self-distributive law on Higgs strings) a (Right self-distributive law on Higgs strings) as well as a (Up self-distributive law on Higgs strings) as well as a (Down self-distributive law on Higgs strings) Applying the Quandle/Rack mechanism to holographic strings captures the essence of holographic symmetric string replication $X_{J(K)}$ through vibration as well as Reidmeister permutations. According to the Emmitt, strings vibrating on the Emmitt Lattice adhere to Khovanov's homology when knotting, and just like tame knots in 3Dim Euclidean space have a fundamental Quandle, so do the nodes or Black holes on the Emmitt or Leach lattice. The mere fact that Quandles are knot invariants means that if two holographic string knots on the Emmitt are Isomorphic, then there exist a homeomorphism such that when applying a Chern-Simon 3 form found in a Leech- Lattice; we may carry one knot into another by Orientation reversing or Ambient Isotopy through "Alexander Quandles that result in the computation of the Alexander Polynomials for our holographic knotted strings. Thus the binary operation acts as a self-induced form of quantum peristalsis along the surface of the string to replicate or make copies in the form of $(N+1)$. Where the biological processes "Peristalsis" is the process by which material is moved through anatomical passages by the contraction of smooth muscles in rhythmic waves, in holographic cosmology our vibrating string pushes the stacks of re-combinated and simply connected fields via permutations along the surface of the Higgs string allowing for the induced frequencies to

replicate string reflections [6].

$$\text{Or } h_{xb}(G_{26}, X_{J(K)}) = \text{Hom}(h_{xb}(G_{26}, X_{J(K)}), X_{J(K)}),$$

$$\text{Where } X_{J(K)} = h_{xb}(G_{26}, X_{J(K)})$$

are reflections of the compactified Higgs fields or cosmic string. [8] (here G_{26} is gravitation in 26dim, h_{xb} is the 2dim world sheet super symmetric higgs string, "Hom" implies that its homological, and $X_{J(K)}$ is a cosmological reflective string or cosmological frequency)

III: The Emmitt modular lattice is similar to the t'Hooft/Suskin theory on Holographic principles where the total information content dwelling in a given volume of space is equivalent to a theory that lives on the surface area that encloses that region, accept that unlike t'Hoofts assumption that the dynamics of the horizon of Black holes is controlled by a Euclidean string[11]; Emmitt theory insists that the black hole is nothing more but an entropy that is a mere reflective frequency or manifestation of holographic string combinatorics. Hence considering B to be the covariant entropy bond in $(D + 2)$ Dim hypersurface with area volume $A(B)$; than allowing a $(D - 3)$ Dim hypersurface light sheet (L) as our projector on B , generates a congruence of null geodesic's beginning at B and extending orthogonally from B and having negative expansion. Than if we allow S as the entropy of any matter illuminated by B 's light sheet, than according to t'Hooft and Suskin we get [12]

$$S(L) \leq A(B)/4$$

Yet in Holographic skeletal modular theory, or with the Emmitt we see that the full description of a given region R_{xb} of our G_{26} dim universe can be reflected in a continuous series, so that

$$S(L) \leq A(B)/4$$

Becomes

$$h_{xb}(G_{26}, X_{J(K)}) = \text{Hom}(h_{xb}(G_{26}, X_{J(K)}), X_{J(K)}), \text{ where } X_{J(K)} = h_{xb}(G_{26}, X_{J(K)}, X_{J(K)}), \dots, X_{J(K)}$$

Suggesting that our holographic skeletal structure is an integral Cohomology class [3]. Revealing that upon Involution the super- symmetric fields begin to create continuous mirrored images of themselves in the form of Quanded string fibre bundles, with their self-and anti-self dual solutions depicted as skeletal Einstein spaces [14]. The recombination and knotting will eventually result in a chain homotopy or Lattice-Like structure with the knotted points of the string products becoming singular nodes or Black Holes giving birth to a perfect Haar series with their event horizons acting as perfect thermodynamic cosmological projectors [11]. As the Strings continue oscillating they begin to develop machinery that utilizes Khovanov's Homology on the nodes; and we begin to realize that the continuous vibrations are building what appears to be a Skeletal String structure; or Holographic Modular Lattice with "String Theory" set as the physiological structure of Holographic Cosmology. However according to Levin and

Wen [5] this effect would only be feasible if at low-energies the Kinetic energy of these String Holographic Bundles dominates the String-Bundle Torsion in order to cause Condensation which would adhere to khovanov's wonderful State-Summation Homology Theorem:[6]

$$(K) = \text{the sum of } f(A)_K / (J_{(K)}) \text{IIII}$$

Implying that the String Condensation gives rise to both Energy Gauge Bosons and Fermions in what seems like three-dimensional Chern-Simons Symmetry. [5] [13][6]

IV: Conclusion:

Thus it appears that the Emmitt theory is implying that our Higgs field is actually a naked singularity or cosmic super string composed of compactified fields projecting holographic frequencies. This Higgs string according to the theory is vibrating, Knotting, and twisting creating a dynamic holographic space-time shadow, along with a 32 Component SO (10) Spinor that somehow maintains a duality light switch between Bosonic as well as Fermionic states. With the self-induced oscillations not requiring a background stage. Each quantum of volume from the induced black holes depicting Nodes that are associated with intertwiners introducing the thermal characteristic of chronology on our cosmic string weaved Lattice [16]. Where each Leech cluster contains a series of circle bundles nesting Cosmological Constants similar to ours with Their own incremental value or wave function depicting individual "Holographic Universes that appear to be Symmetrically Icosahedral as well as Hamiltonian connected. The volume of a Region being a sum of terms, one for each entropy adhering node or Black hole on the Emmitt; embracing the notion of a Conway, Gordan structure that results in complete Coxeter element.

A universe in honor of RoveLLi.

A quantized discrete holographic geometry.

I anticipate that the question of the cosmological constant Simply arises due to our naivety not merely of self, yet regarding our curiosity for knowledge especially pertaining to cosmological evolution. We as a species are still very much in the infantile stage regarding knowledge of universal inception; and our realization that without gravitation the question of the vacuum energy just wouldn't have arisen [7]. Hence is it possible that through string condensation and vibration we experience some sort of residue such as Quantum foam or what we call Dark matter? Hmm perhaps, fortunately many questions still remain, such as are dark matter and quantum foam the exact same thing? Is dark energy nothing more than the frequency of holographic vibrating strings? Is it feasible that the main reason that we experience Reduction of state in Quantum Mechanics is because we are not familiar with the frequency or music of the Emmitt, or our Universe as a whole? [15] Emmitt theory appears to suggest it. Yet the truth is that we just don't know. Even with our so called advances in technology in terms of medicine, and mathematics including the physical sciences, we appear to still be so primitive. As the great Richard

Feynman once said, "The truth is that we just don't know, we are all in the dark". Perhaps the age old debate over the grand unification of Quantum mechanics and General Relativity on a gravitationally quantized loop actually occurred on a self-sustaining Emmitt, with our Dilaton playing the role of a holographic arena? The theory embraces Whiteheads pioneering suggestion that fields live on fields; yet with a wonderful twist, for the Emmitt theory says that what we have are fields on fields weaved with a holographic string reflecting a space-time that in the end may just be a complete illusion! Thus because the Emmitt theory suggests that we are dwelling in a 26 dimensional holographic universe dominated by gravitation (S,T) Einstein's field equation requires revision, so that

$$R^5_{xb} / l - 1/2Rg_{xb} + \Lambda g_{xb} = -24(\pi)^{13} J_{(K)} (L_s^{26} / g_s^2) = G_{26dim}. \text{ Where } L$$

is planks constant in 26dim, and g is the 2 dim string coupling constant. As such Hawking's depiction of radiation takes a new form as

$$(h_{xb}, a^2, G_{26}) = (hbar)^5 (C)^{13} (\pi)^{13} (h_{xb}, a^2, g^2)$$

Where G_{26} is gravitation in 26dim, h_{xb} is the 2 dim world sheet super symmetric higgs string, (C) is a tetrad tachyon matrix, a^2 is the square of the Zeuthen-Segre invariant, and g is the string coupling constant.

Final remark:

This paper does not attempt a formal proof on the subject of Holographic Skeletal Modular functions, but to only inspire further discussion in hopes that they may lead to not only enlightenment of self, yet more importantly of "selves". It is my very strong belief that at this stage of our cognitive development, I am in doubt of our limited homosapien intellectual ability to know enough about our Universal evolution to offer proof of any sort regarding cosmological inception.

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