

4.8 TeV Circulation Energy Generated By Force Of Creation Between Yangton And Yington Particles In Wu's Pairs Based On Yangton And Yington Theory

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Abstract

A potential new fundamental force involving the detection of unusual particle decay at a high energy level of 4.8 TeV during experiments at CERN's Large Hadron Collider was recently discovered by Google AI. It suggests the presence of particles or interactions that do not fit within the current Standard Model of physics. On the other hand, according to Yangton and Yington Theory, all the subatomic particles in Standard Model including quarks, electron, neutrinos, neutron, proton, photon, gluons, graviton, W and Z Bosons, and Higgs Bosons can be structured and interpreted by various string structures composed of Wu's Pairs bonded together by string force and four basic forces. However, there is no particle and force in Standard Model that can match with Yangton and Yington particles and Force of Creation in Wu's Pairs. Therefore, it is suggested that "4.8 TeV could very well be the circulation energy generated by Force of Creation between Yangton and Yington particles in Wu's pairs". Such that not only can it prove the existence of Yangton and Yington particles and Force of Creation in Wu's Pairs, the building blocks of all matters in the universe, but also shows that Yangton and Yington Theory is a sound reasonable model of the universe.

Keywords: Standard Model, Quantum Field Theory, Unified Field Theory, String Theory, Subatomic Particles, Yangton and Yington Theory, Five Principles of the Universe, Force of Creation, Wu's Pairs, Yangton and Yington Particles, String Force, Higgs Field, Higgs Boson.

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I. Introduction

A potential new fundamental force discovered recently by Google AI involves the detection of unusual particle decay at an energy level of 4.8 TeV during experiments at CERN's Large Hadron Collider [1]. However, specific details about the energy of the new particles are not provided in the available sources. This energy level is significant because it suggests the presence of particles or interactions that do not fit within the current Standard Model of physics, which is the framework used to describe the fundamental forces and subatomic particles in the universe.

Based on the AI analysis, the energy level of 4.8 TeV in particle physics is significant for the following reasons:

1. New Physics: Energy levels in the TeV range allow physicists to explore phenomena beyond the Standard Model which describes known particles and their interactions. It can indicate the existence of new particles or forces, suggesting new theories and understandings of fundamental physics.
2. Heavy Particles: High energy collisions can create high energy or heavy particles, including potential candidates for dark matter, supersymmetry (SUSY) or other exotic particles. The ability to produce and study these particles could answer some of the biggest questions in physics.
3. Higgs Dynamics: High energy level of 4.8 TeV could provide insights into the Higgs field and its role in mass generation.

The 4.8 TeV energy level marks a critical frontier in particle physics, representing an opportunity to uncover new fundamental aspects of the universe and advance our understanding of the underlying principles governing matter and energy.

II. Yangton And Yington Theory

Yangton and Yington Theory [2] is a hypothetical theory based on a pair of superfine Yangton and Yington antimatter particles with built-in inter-attractive Force of Creation circulating against each other on an orbit. These pairs of Yangton and Yington circulating particles are named "Wu's Pairs" which is considered as the building blocks of all matters in the universe.

Yangton and Yington Theory can successfully explain that elementary subatomic particles are composed of string structures built upon Wu's Pairs with String Force [3] in accordance to String Theory [4].

Also, String force and Four Basic Forces are induced from Force of Creation in compliance with Unified Field Theory [5].

Furthermore, Yangton and Yington Theory can bridge Quantum Theory with Relativity, also interprets and correlates space, time, energy and matter in the universe. Therefore, it is believed that Yangton and Yington Theory is a theory of everything.

III. Space And Energy Correlated Five Principles Of The Universe

It is proposed that God's Particles, the building blocks of all matters in the universe together with space and energy are generated based on the following "Space and Energy Correlated Five Principles of The Universe" [6][7] (revised from Five Principles of The Universe [8]):

1. There was None (no Space, Energy, Matter and Time) in the universe in the beginning.
2. None to Something must be an instantly reversible process.
3. The Something must be a pair of Antimatter particles with inter-attractive force such that they can instantly attract and destroy each other. (In addition, Corresponding Space is generated in order to hold Something in a volume of Space and Corresponding Energy is produced due to the interaction between Space and inter-attractive force.)
4. From Something to Permanent Matter, an external force is needed to drive the pair of Antimatter particles into circulation motion so as to avoid them from recombination and destruction. (Consequently, additional Corresponding Energy and Corresponding Space are generated due to the circulation motion.)
5. Eventually the whole universe will end and go back to *None*.

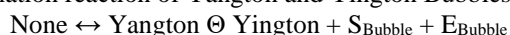
Accordingly, based on Yangton and Yington Theory, Something is made of a pair of Yangton and Yington antimatter particles named Yangton and Yington Bubbles. Permanent Matter on the other hand is made of a pair of circulating Yangton and Yington particles named Wu's Pairs. Also the inter-attractive force between Yangton and Yington particles is named Force of Creation.

In Space and Energy Correlated Five Principles of the Universe, both Corresponding Space and Corresponding Energy can be created from None. In other words, Law of Conservation of Energy is only true in energy transformation between two systems without Creation of Space. Also, Force of Creation is created inevitably with both Yangton and Yington particles as the "Nature Strength" to drive everything back to None. The interaction between Force of Creation and the Corresponding Spaces gives Internal Energy to Yangton and Yington Bubbles, also Circulation Energy to Wu's Pairs [6][7].

Once Wu's Pairs were formed, all subatomic particles such as quarks, leptons, bosons, photon, electron, neutron and proton, with string force and four basic forces including gravitational force, electromagnetic force, weak force and strong force can be generated from Wu's Pairs and Force of Creation [3][9]. Then hydrogen atoms were produced and finally stars and galaxies were formed and the entire universe was born.

IV. Yangton And Yington Bubbles – Building Blocks Of Space

According to the 1st and 3rd principle of Space and Energy Correlated Five Principles of the Universe, the formation reaction of Yangton and Yington Bubbles from None can be formulated as follows [6][7]:



Where None has no space, time, energy and matter, Θ represents Force of Creation, Yangton Θ Yington represents Yangton and Yington Bubble (Something). S_{Bubble} is the corresponding space (Vacuum Space) generated by the Bubble. E_{Bubble} is Bubble's internal energy, the corresponding energy (Vacuum Energy) generated by the interaction between Force of Creation and the corresponding space.

In the reaction, Force of Creation is generated with Yangton and Yington Bubble from None at Singularity in Big Bang Explosion at the beginning of the universe. Meantime Corresponding Space (size of the bubble named Vacuum Space) and Corresponding Energy (Force of Creation times Corresponding Space named Vacuum Energy) are produced together with Yangton and Yington Bubble.

Although this reaction doesn't require any external energy as reactant, small external activation energy is needed to initiate the reaction. It is believed that the activation energy is provided by the string forces between the overcrowded Yangton and Yington Bubbles generated from the Singularity in Big Bang Explosion at the beginning of the universe.

In addition, according to 2nd principle of Space and Energy Correlated Five Principles of the Universe, the formation reaction of Yangton and Yington Bubbles is instantly reversible. Once the reaction is triggered by the activation energy, Yangton and Yington Bubbles will be generated from None. Also, immediately they will follow the reverse process and go back to None, such that no additional vacuum energy and vacuum space can be generated. Another reason the formation reaction of Yangton and Yington Bubbles must be reversible is because of the 5th principle, the reverse of the formation reaction is the most certain and easy way to ensure that everything will go back to None.

Furthermore, the Corresponding Space (Vacuum Space) generated by Yangton and Yington Bubbles is the building blocks of Space. It contains a fixed average volume of space and amount of mass, no matter of local gravitational field and aging of the universe. As a consequence, the entire Space can be constructed and maintained as a continuous network of Yangton and Yington Bubbles since Big Bang Explosion. Also, it is believed that Yangton and Yington Bubbles and Dark Matter are the same substance [6] which gives the properties of Dark Matter and provides an indirect proof to the existence of Dark Matter.

On the other hand, the Corresponding Energy (Vacuum Energy) generated by Yangton and Yington Bubbles is the energy generated from vacuum, which can be applied in quantum mechanics and quantum field theories. However, because it is bonded to Corresponding Space (Vacuum Space) with Yangton and Yington Bubble, it cannot be applied as Dark Energy causing expansion of the universe.

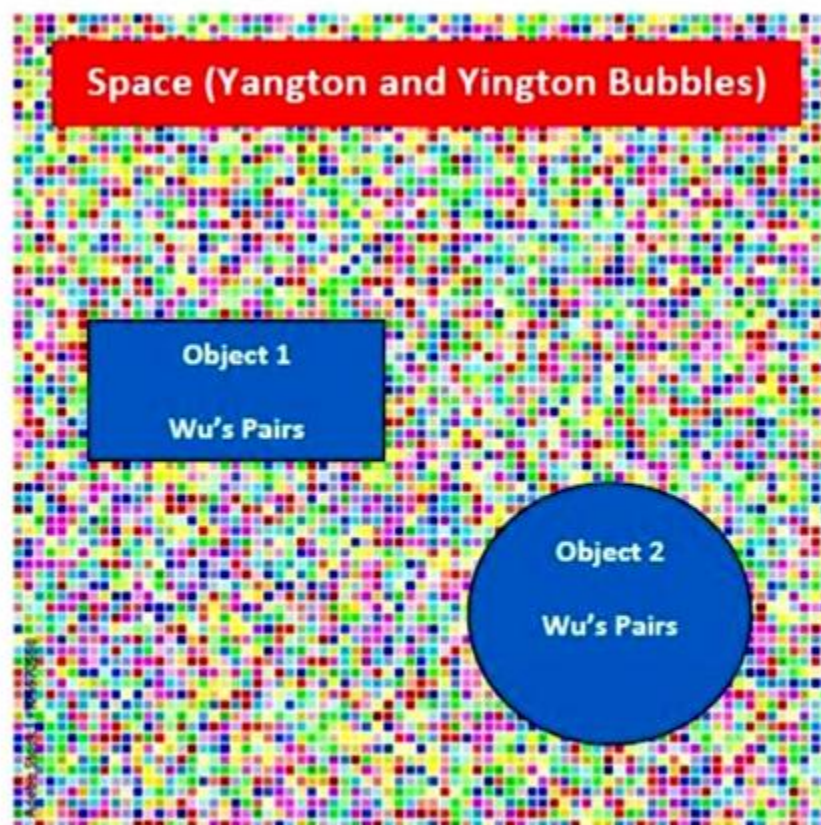


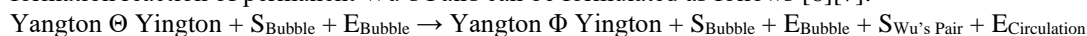
Fig. 1 The correlation between “Space” composed of Yangton and Yington Bubbles and “Matter” composed of Wu’s Pairs.

It is believed that Yangton and Yington Bubbles in the Vacuum Space are analogous to H₂O molecules in the water. Vacuum Space can be considered as the “Sea of Yangton and Yington Bubbles” (Fig. 1) [6][7], where a matter composed of Wu’s Pairs can move freely, like a fish swims in ocean, except beyond the boundary where there is nothing but None.

V. Wu’s Pairs – Building Blocks Of Matter

Once Yangton and Yington Bubbles were generated at the Singularity from Big Bang Explosion, enforced by the inter-attractive Force of Creation, Yangton and Yington particles will instantly recombine to destroy each other together with the corresponding space and corresponding energy, such that Yangton and Yington Bubbles can go back to None. Or otherwise, by taking a bigger external activation energy generated from Big Bang Explosion, the temporary Yangton and Yington Bubble can become a permanent Wu’s Pair with a circulation motion balanced between centrifugal force and inter-attractive Force of Creation. Meantime, a corresponding space (volume of Wu’s Pair) and corresponding energy (Energy of Circulation) can be cogenerated with Wu’s Pairs.

According to the 4th principle of Space and Energy Correlated Five Principles of the Universe, the formation reaction of permanent Wu's Pairs can be formulated as follows [6][7]:



Where Yangton Θ Yington represents temporary Yangton and Yington Bubble. Yangton Φ Yington represents permanent circulating Wu's Pair. S_{Bubble} is the corresponding space (Vacuum Space) generated by the Bubble and E_{Bubble} is the corresponding energy (Vacuum Energy) as Bubble's internal energy generated by the interaction between Force of Creation and the corresponding space generated by the Bubble. $S_{\text{Wu's Pair}}$ is the corresponding space (Matter Space) generated by Wu's Pair and $E_{\text{Circulation}}$ is the corresponding energy (Matter Energy) as Wu's Pair's circulation energy generated by the interaction between Force of Creation and the corresponding space generated by Wu's Pair.

The Corresponding Space (Matter Space) generated by Wu's Pairs is the diameter of Wu's Pairs (Wu Unit Length) which is dependent on the local gravitational field and aging of the universe. The Corresponding Energy (Matter Energy) generated by Yangton and Yington particles in Wu's pairs is the fundamental energy of all the energies in the universe. Also, the initial Wu's Pairs produced by Yangton and Yington Bubbles are in the microwave range with long wavelength as that of CMB radiation [10].

Like the formation reaction of Yangton and Yington Bubbles, the formation reaction of Wu's Pairs also doesn't need any external energy as reactant. However, it is triggered by much bigger activation energy than that of the Bubble's formation reaction, which can only be produced by the string forces between the overcrowded Yangton and Yington Bubbles generated from the Singularity in Big Bang Explosion at the beginning of the universe.

Wu's Pairs can only be generated from Yangton and Yington Bubbles during Big Bang Explosion at beginning of the universe. Since formation reaction of Wu's Pairs is irreversible, Wu's Pairs cannot be destroyed except in black hole where Yangton and Yington particles in Wu's Pairs are separated by extremely large gravitational force and then annihilated by Yangton and Yington collision. Or through aging of the universe, where after trillions of years, Wu's Pairs become extremely small and the circulation speed between Yangton and Yington particles become extremely fast, such that they eventually collapse and destroy each other.

VI. Bubble Internal Energy Versus Circulation Energy

Both the attractive forces in Yangton and Yington Bubbles and Wu's Pairs are Force of Creation. However, the Force of Creation in Wu's Pairs are much bigger than that of Yangton and Yington Bubbles, therefore Energy of Circulation (Matter Energy) generated in the formation reaction of Wu's Pairs is much bigger than Bubble's Energy (Vacuum Energy) generated in the formation reaction of Yangton and Yington Bubbles. In addition, because of the large activation energy, Wu's Pairs maintain permanent without reversing and breaking down unless under severe environments such as extremely large gravitational field in black hole or extremely fast circulation speed at final stage of aging of the universe.

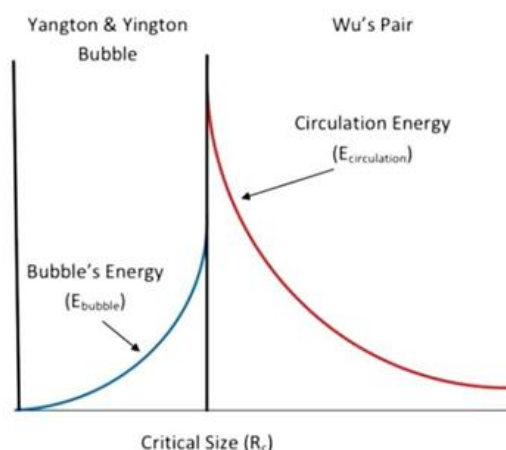


Fig. 2 Energy (E_{Bubble}) and Space (S_{Bubble}) are generated with temporary Yangton and Yington Bubble which increase with the size of Yangton and Yington Bubble by Hooke's Law. Once the critical size is reached, permanent Wu's Pair is formed. Also ($E_{\text{Circulation}}$) and space ($S_{\text{Wu's Pair}}$) following Coulomb's Law are created for Yangton and Yington circulation.

Fig. 2 (revised from [6][7]) shows the correlations between Bubble's internal energy (E_{Bubble}) generated by the temporary Yangton and Yington Bubbles and circulation energy ($E_{\text{Circulation}}$) generated by the permanent Wu's Pairs. Before reaching the critical size, triggered by small external activation energy, temporary Yangton

and Yington Bubbles can be generated with both corresponding space and internal energy following Hooke's Law. At the critical size, triggered by large external activation energy, permanent Wu's Pairs can be created with much bigger corresponding space and circulation energy following Coulomb's Law for the circulation of Yangton and Yington Pairs. The critical size is the diameter of Wu's Pair, named Wu Unit Length which is dependent on the gravitational field and aging of the universe.

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VII. Conclusion

According to Yangton and Yington Theory, in addition to four basic forces, there are two fundamental forces, String Force and Force of Creation in the universe. All six forces are generated from the attractive force between Yangton and Yington particles in compliance with unified field theory.

String Force is the attractive force between Wu's Pairs, the building blocks and mass of all matters in the universe. On the other hand, based on Standard Model, Higgs Bosons are the mass carrier of all matters in the universe. Therefore, Higgs Bosons are the same particles as Wu's Pairs. Also, Higgs Field the distribution of Higgs Bosons is the same as String Field the distribution of String Force and Wu's Pairs. As a result, Higgs Energy 125 GeV discovered by CERN in 2012 [11] generated by Higgs Boson, is also considered as the String Energy generated by String Force between Wu's Pairs in the elementary subatomic particles. This proves the existence of Higgs Bosons and Higgs Field, also the existence of Wu's Pairs and String Force.

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