

Yangton and Yington – A Hypothetical Theory of Everything

Edward T. H. Wu

Solar Buster Corporation
USA (818) 991-7437

E-mail: edwardthwu@yahoo.com

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Abstract: A hypothetical theory of a Yangton and Yington circulating pair with inter-attractive “Force of Creation” is proposed to explain the creation of the universe and the formation of light and Matter. This theory can combine Particle Physics and Quantum Mechanics, unify Four Forces, imply Higgs Boson Particles, implement String Theory, define Black Hole, as well as provide proof to Einstein’s Theory $E = MC^2$. It is also assumed that Dark Matter is made of a multiple of Yangton and Yington circulating pairs.

Keywords: Yangton, Yington, Photon, Subatomic Particles, Particle Physics, Quantum Mechanics, Four Forces, Higgs Boson, String Theory, Black Hole, Einstein’s Theory and Dark Matter.

Introduction

A hypothetical theory that a pair of super fine particles, Yangton and Yington, with an inter-attractive “Force of Creation”, can be spontaneously created at anywhere and anytime in the universe, is proposed as the “Origin of Creation” that could make “Something From Nothing”. However, because of the reversible process enforced by the inter-attractive force, after creation, within no time, Yangton and Yington recombine and destroy each other to ensure that “Something Becomes Nothing” and the whole universe returns back to empty space.

In the beginning there was nothing in the universe until the Big Bang (Ref. 1) explosion. It is proposed that Photon (Ref. 2) was first formed permanently by a pair of Yangton and Yington particles that was created from nothing; however instead of recombination, induced by the explosion; they started moving against each other in a circular orbit. Free Photon travels at light speed which can combine Particle Physics (Ref. 3) and Quantum Mechanics (Ref. 4) to explain various properties of light. Still Photon, on the other hand forms the building block of all Subatomic Particles (Ref. 5) including Quarks (Ref. 6), Electrons, Protons and Neutrons. A String Structure formed by Still Photons can implement the String Theory (Ref. 7). Also the attractive force between the String Structures can explain the Gravitation Force between Higgs Boson Particles (Ref. 8).

It is believed that the “Force of Creation” between the Yangton and Yington pair is the basic force that creates the universe; also it unifies and derives Four Forces (Ref. 9) including Weak, Strong, Electromagnetic and Gravitation Forces. However, inside the Black Hole (Ref. 10), enforced by “Force of Creation”, Yangton and Yington recombine each other resulting from the interruption of the circulation caused by the extremely high density and massive gravity. Black Hole is the grave yard of universe where all Matters are destroyed and everything turns back to nothing.

In addition, based on the Still Photon and String Structure, transformation of Matter to Free Photons can be used as a model to explain the conversion of Matter to Energy, Einstein’s Theory $E = MC^2$ (Ref. 11).

Finally a Dark Matter (Ref. 12) with tetrahedral structure of four Yangton and Yington circulating pairs is proposed to explain the invisibility and low Gravitation Force of Dark Matter.

1. Create Something from Nothing – It must be simple and reversible

It is proposed that a pair of super fine particles, Yangton and Yington (Fig. 1) with an inter-attractive “Force of Creation”, can be spontaneously formed in the universe at anytime and anywhere. However, due to the enforcement of the inter-attractive “Force of Creation”, Yangton and Yington immediately recombine and destroy each other such that something becomes nothing again and everything disappeared in the empty space. (Yangton + Yington + Energy of Destruction = 0).

Since the creation of something from nothing can only be an instant, spontaneous and reversible process, it is believed that the sizes of Yangton and Yington is the finest limit of dimension and the duration of the recombination is the finest limit of time. Beyond them there is no time and no space, also, of cause no Matter... There is absolutely nothing.

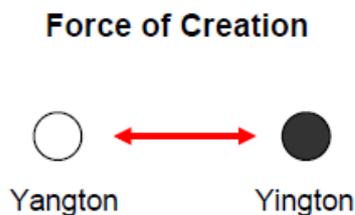


Fig. 1 A Yangton and Yington pair and Force of Creation

2. From Something to Photon – Circulation is the key keeps everything alive

It is assumed due to Big Bang explosion, Yangton and Yington particle pairs became permanently exist by absorbing “Energy of Formation” and started moving

simultaneously against each other in a circular orbit against the inter-attractive “Force of Creation” (Fig. 2). These Yangton and Yington circulating pairs are Photons. A “Free Photon” can travel in different Matters at different speeds. A “Still Photon”, on the other hand is the basic building block of all Matters.

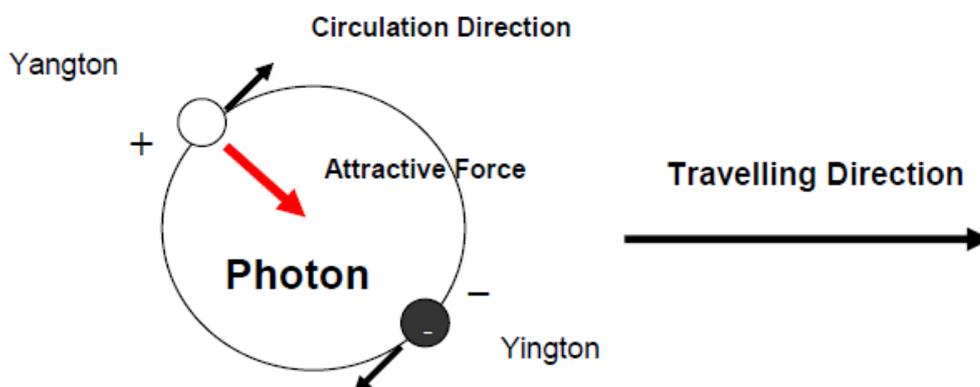


Fig. 2 A Hypothetical Photon

3. Free Photon is Truly a Particle and also a Wave

a. Electromagnetic Wave & Electric Unit-Charge

Because of the inter-attractive force between Yangton and Yington, it is assumed that Yangton carries one positive unit-charge and Yington carries one negative unit-charge and together they form an electric dipole. These unit-charges are the basic units of the normal electric charges that are carried by Electrons and Protons except in a much smaller scale.

Resulting from the circulation of the Yangton and Yington pair, the rotation of the electric dipole inside the Photon,

electromagnetic wave (Ref. 13) can be generated and carried by a Free Photon to far distance at light speed (Fig. 3). From a macroscopic point of view, Photon can be considered as a neutral particle, simply because any external electric force induced by Yangton can balance out completely that from Yington due to their circulation in an extremely small distance.

Electron is different from Yington, because it is assumed that Electron is a cluster of Still Photons, which carries one negative electric charge that contains a number of negative unit-charges. Proton on the other hand is also different from Yangton in a similar way except containing positive unit-charges.

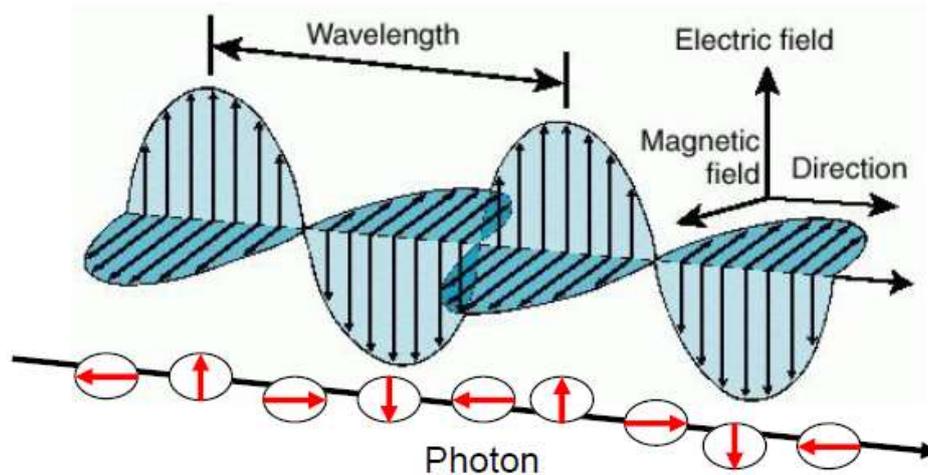


Fig. 3 Electromagnetic wave of a Photon generated in travelling

b. Zero Mass & Constant Light Speed & Black Hole

A Free Photon is a super fine particle of circulating Yangton and Yington pair traveling at light speed which takes no influence from the attractive force between Yangton and Yington that is induced by a Matter at relatively far distance comparing circulation. For example, a Free Photon cannot be influenced by the gravity force of Earth and Sun, except inside a super massive Black Hole. In another word, a Free Photon has both zero mass and weight on the surface of Earth and Sun except in the Black Hole. A Still Photon can escape into the vacuum space to become Free Photon from the surface of atoms, subatomic particles and Photon clusters made of the String Structure (Fig. 5) that requires the same escape energy at a constant light speed 3×10^8 m/s. However, a Still Photon can't escape from a Matter that is made of plasma with extremely large density such as that in the Black Hole.

Furthermore, because of the massive gravity generated by the extremely large density inside the Black Hole, the balance between "Force of Creation" and the circulation of Yangton and Yington pair in Photon is interrupted, so that Yangton and Yington can recombine and destroy each other. Matters are disappeared in the Black Hole and the universe once again becomes an empty space.

c. Frequency, Energy and Temperature

The size, internal energy and kinetic energy $E = h \nu$ (Ref. 2) of a Free Photon are all dependent on the frequency of the

circulation of Yangton and Yington pair. A Free Photon with higher frequency has larger kinetic energy and smaller wave length at constant light speed. It also has larger internal energy (Energy of Formation) with higher circulation speed, but smaller circulation orbit and size.

When a Still Photon escapes from a substance, it carries the average energy which is reflected by the temperature of the substance ($E = h \nu = f(T)$), as described in Black Body Radiation (Ref. 14). At Absolute zero degree (Ref. 15), the Still Photon of a Yangton and Yington pair is "frozen" in the substance with a minimum circulation frequency (ν_0) and "Energy of Formation" to balance the inter-attraction force between the Yangton and Yington pair. There is not enough "Energy of Separation" to kick off a Free Photon (Energy of Separation = Kinetic Energy = $h\nu_0$) from the surface of any substance.

d. Coherence and Interference

The electromagnetic waves generated by a group of Free Photons can lineup each other to form a coherent light (Fig. 4). When two Free Photons come together with their electromagnetic waves in phase, they are constructive, otherwise they are destructive. These are the reasons to cause light interferences. When two Free Photons come together in destructive interference, they combine to form a small piece of Matter and become a part of substance (Fig.5).

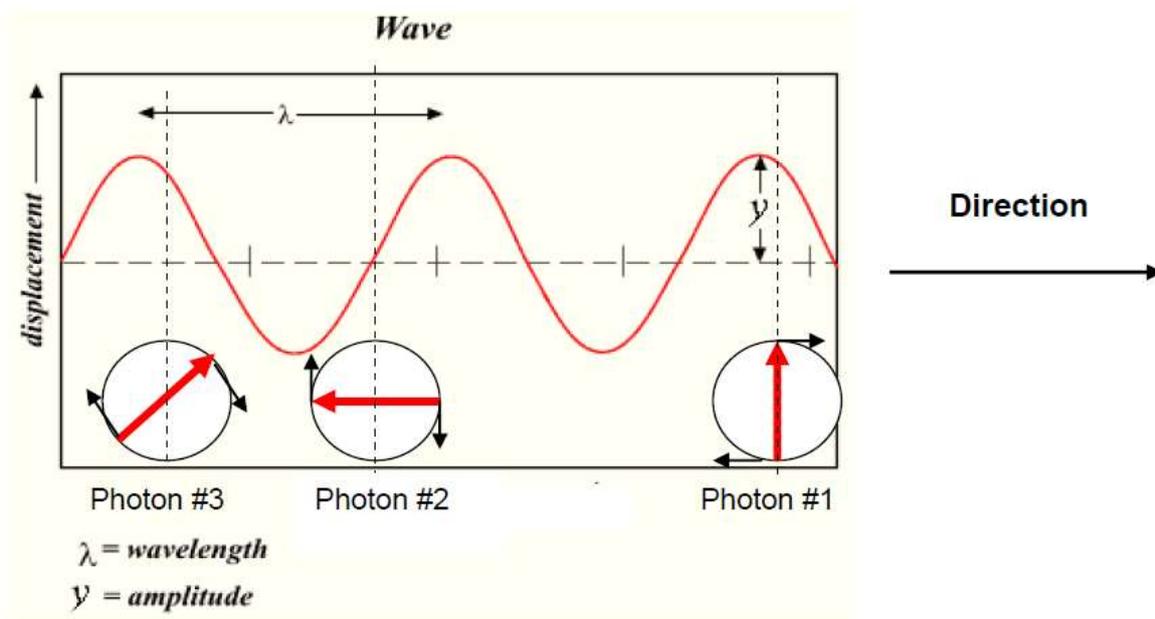


Fig. 4 Coherent Photons and their electromagnetic waves

e. Refraction & Reflection

Free Photon travels at different speeds in Matters of different densities. Free Photon also travels in different directions when crossing the boundary of different Matters for the purpose of maintaining the coherency and frequency. These phenomena are called Refraction (Ref. 16). On the other hand, Free Photon can also bounce back from a flat surface like a particle which is called Reflection.

f. Polarization

Free Photon travels like a flying disc in the plane of Yangton and Yington circulation. Free Photon can pass through a polarizer (Ref. 17) only at a preferred orientation where both the plane of the circulation and the direction of polarization are in parallel.

4. Still Photon is the building block of all Matters

It is assumed that all Matters are made of Still Photon, a Yangton and Yington circulating pair sit steady at a fixed position. With the preference of orientation due to the attractive force between Yangton and Yington or the dipoles of the adjacent Still Photons, unique structures of subatomic particles can be formed by using the Still Photons as the building blocks. For example, String and Ring Structures (Fig. 5) can be formed by a number of disc-like Still Photons; each contains a pair of Yangton and Yington in a circular orbit. The String Structure can be used for the implementation of String Theory. Also, because of the attractive force generated between two String Structures of the same circulation direction (Fig. 5), Gravitation Force can be formed between Higgs Boson Particles based on the String Structures.

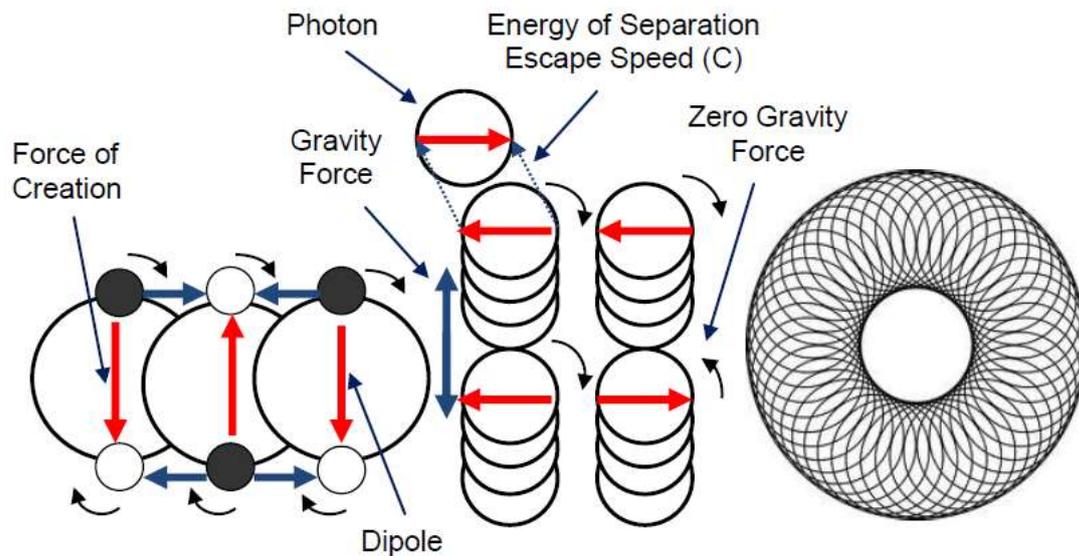


Fig. 5 Two Photons combine in a preferred direction to form string and ring structures in subatomic particles

5. Force of Creation – The Base of Four Forces

Furthermore, it is assumed that the Four Forces including Weak, Strong, Electromagnetic and Gravitation Forces in the universe are generated from the “Force of Creation”, the attractive force between Yangton and Yington. Each of these forces is associated with a unique structure of Photon clusters inside the subatomic particles. For example, a String Structure with dipoles at both ends (Fig. 5) can generate attractive forces among the adjacent String Structures of the same circulation direction, but the opposite direction. This attractive force is proposed as the Gravitation Force which is commonly found in the universe between Matters.

6. Einstein’s Theory $E = MC^2$

When a Matter explodes to become Free Photons that escape into the vacant space at a constant light speed of 3×10^8 m/s, a massive energy in the magnitude of MC^2 is released. This theory is proposed by Einstein to predict that Matter and Energy are interchangeable; also a huge energy can be produced through nuclear reaction. However, there is no explanation, why MC^2 ?

Based on our models that a traveling Yangton and Yington circulating pair makes a Free Photon and a cluster of Still Photons makes a Matter, in the explosion, we can assume that a group of subatomic particles with String Structures and tiny Masses are escaped into the space at a light speed 3×10^8 m/s (C). The total kinetic energy of the Mass can

thus be calculated as $\frac{1}{2} MC^2$ according to the classical mechanics. Although to separate the subatomic particles from a cluster of String Structures to individual Free Photons traveling at light speed, additional Energy is needed, however, it is much smaller than the kinetic energy; therefore, the total energy exploded from the conversion of a Matter to a group of Free Photons, or in another word, from Mass to Energy, is in the magnitude of MC^2 .

7. What is Dark Matter?

Dark Matter is assumed to be made of a multiple of Yangton and Yington pairs. For example, a tetrahedral structure of four Yangton and Yington pairs (Fig. 6), where each Yangton and Yington pair is circulating on its own orbit at 109.5 degree away from the other three pairs. Because the Yangton Center is very close or even coincides with the Yington Center, such that there is a very small or even no dipole in the center of tetrahedral structure, therefore the attractive force between the dipoles of two adjacent Dark Matters is relatively small comparing to that of Still Photons. As a result, the gravity between Dark Matter and other substance is also extremely small.

In contrary to Still Photons, without attractive force, Dark Matter can’t be used as the building block of any other substances. Furthermore, because Dark Matter is an extremely small and isolated particle, which can’t emit any particle such as Free Photon at any temperature, it is totally invisible, that is why it is named after “Dark Matter”.

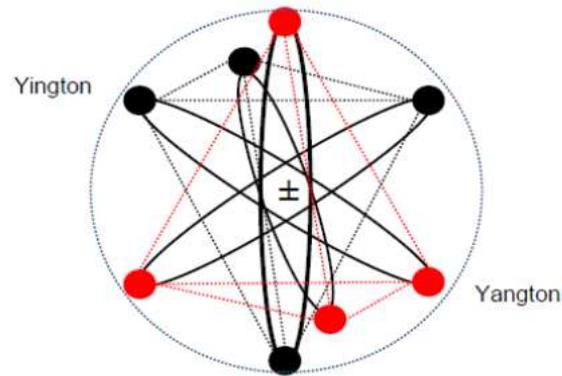


Fig. 6 A model of Dark Matter formed by a tetrahedral structure of four Yangton and Yington pairs.

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