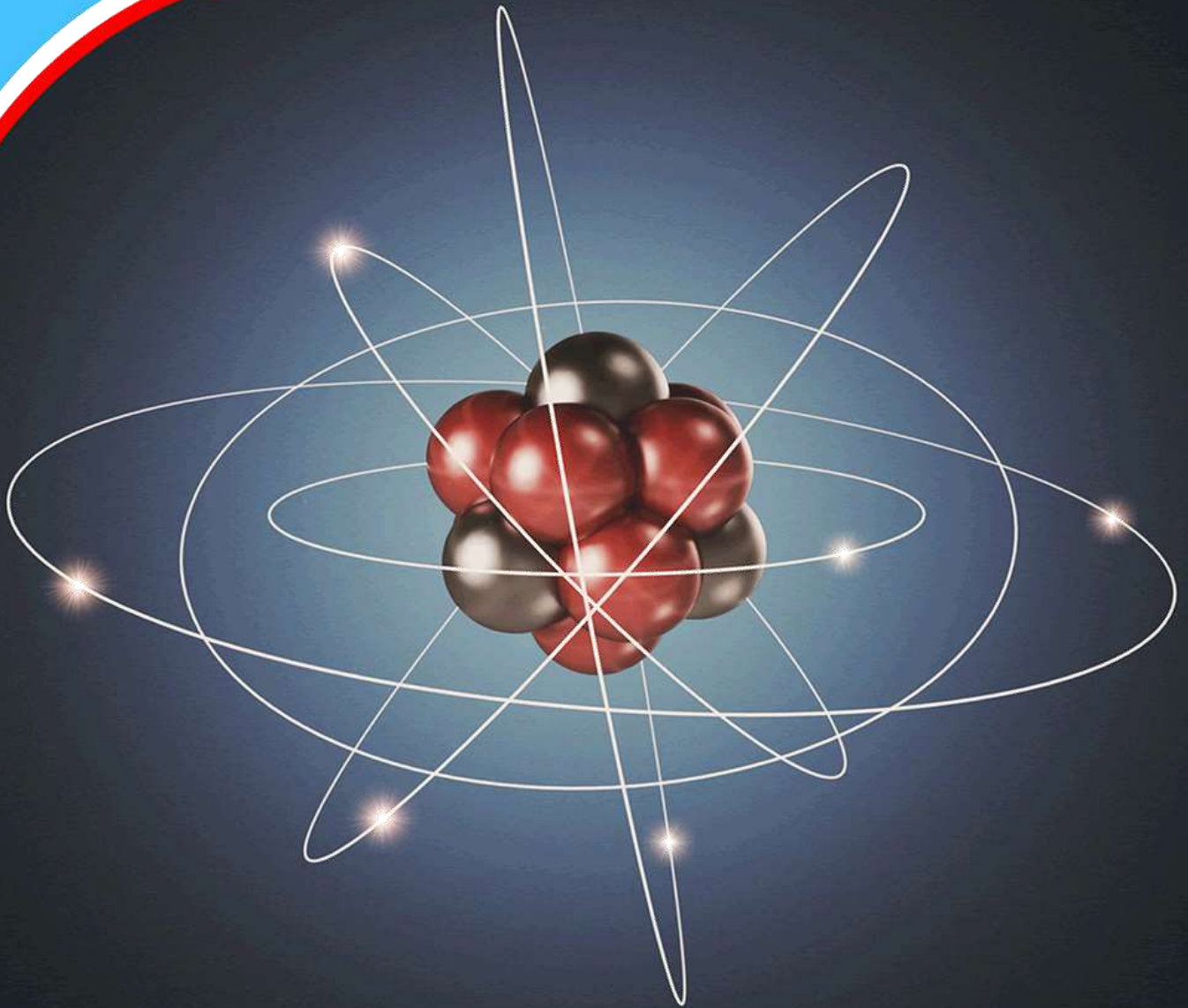


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Dynamic Gravity: Explaining Electrons, Quarks, Anti-Matter and the Double Slit Experiment

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Abstract

Purpose: Dynamic Gravity is the only theory of gravity that perfectly calculates gravity, dark energy, and dark matter with the same equation in accordance with all observations ever made in human history. The purpose of this paper is to explain how electrons and quarks are created and how they create anti-matter. And how this all explains the double slit experiment. And with the 3 simple principles that DG is built upon, it has also explained exactly how the rest of the universe must work if DG is correct.

Materials and Methods: Electrons, quarks, neutrinos, and anti-matter are all vortex's created from different process in the atom. In this paper we will explain exactly what all of these are and how they are created. And we will use this information to resolve the double slit experiment paradox.

Findings: Electrons and Quarks are considered to be single points in space by

classic physics, but Quantum Mechanics says its not a point but a wavelength riddled with probabilities. Both are accepted as there is hard evidence of both. But both of these interpretations are wrong.

Implications to Theory, Practice and Policy: In this paper Dynamic Gravity will explain to great detail what the electron's structure really is; a vortex of EM waves. And how this works explaining the spin of the electron, and additionally how its solves the paradox of the double slit experiment. Recommendations for possible experiments to confirm Dynamic Gravity are also discussed.

Keywords: *Neutrino 13.15.+g, Potons, Gravity 04.80.Cc, electrons 14.60.Cd, anti-matter crisis 96.10.+i, absolute zero 81.70.Ha, quark-gluon, 12.38.Mh, Quark models, 12.39.-x, relativistic electron and positron, 41.75.Ht*

1.0 INTRODUCTION

The 3 simple principles that created Dynamic Gravity and have explained the entire universe are as follows:

1. A down quark is just an up quark and a electron that combined. Evidence of this is that down quarks normally decay into an up quark and electron ^[8].
2. There is no photon shorter and energetic then a gamma wavelength photon because an electron is the highest energy form of an photon. Evidence of this is that the Quantum Mechanical wavelength of a electron is considered to be just shorter the wavelength of a gamma photon.
3. All energy the atom needs to sustain its fundamental forces it gathers from outside the atom. Mainly in the form of heat transfer. Even the great Nickolas Tesla believed this ^[6], and it also drove him to create his own version of Dynamic Gravity theory. Tesla however, lacked critical insight into the nature of the sub-atomic from scientific discoveries to be able to finish his theory and make it copasetic with observations.

From these 3 simple foundations we can create Dynamic Gravity and explain every single mystery physics has ever been stumped by. We can figure out what electrons, quarks, and anti-matter all are and how they are made and destroyed. And hence we can and will even resolve the infamous double slit experiment. Shall we begin?

Main Body

It all starts with an electron with a charge of -1, then you add an up quark with a charge of +2/3. While the two are not counter electric fields for reasons that still elude Dynamic Gravity the electric field generated by the electron is attracted to the gravitational field generated by the up quark. But once they combine they will not completely merge together, this will leave the overall charge of the down quark to be -1/3. Which will leave the down quark as being a negative entity that still is attracted to other up quarks and repulsive to electrons. So the down quark will attract more up quarks and it finds stability with 3 up quarks and 1 electron for an over charge of +1 to make up a proton. Two of the 3 up quarks in a proton will defiantly become entangled at some point during this struggle at least sometimes. Any electron attracted to a proton does not want to touch or as modern Quantum Mechanics claims “because its proof that energy has quantum states” is wrong. The true reason why a electron doesn’t “crash” into the proton is simply because there is already an electron in the proton that repels any other electrons from combining to the proton, nothing more. What modern science calls the nuclear strong force isn’t really a fundamental force. Its actually just the never ending fight for equilibrium of the 3 up quarks in the proton fighting constantly for the possession of one electron. As they revolve in for vortex they renew the field they emit which means a new equilibrium is now in effect between the electron and 3 up quarks. And with a vorticity for an up quark I estimate to be around 2.2% of the speed of light. This constant inner fighting over the sole electron is very rapid by our sense of time. All of this inner fighting in the core of a proton is what leads to so much random spawning of matter and anti-matter. The exact method will be explained later in this paper once we explain what anti-matter is.

If the proton consumes a electron then now it can achieve true stability. First of all, the over charge will be neutral. But also the constant fighting of the 3 quarks for 1 electron in the proton is now 3 up quarks fighting for 2 electrons. So only 1 up quark will be left out. This allows the two electrons possessed by the neutron to actually quantum entangle together to share the smallest space possible and conserve as much energy as possible. This leads to the thought that

the up quarks attached to the entangled electrons may also both be entangled with themselves once again to conserve energy within the system.

It has already been established by Dynamic Gravity in the last paper that electrons are created by electrons in orbitals when sufficient energy is applied to the atom mainly from a magnetic field. A magnetic field drags along the atom and drags the electron moving it in its orbital the maximum distance allowed hence created a new, yet identical electron as the by product. This is how electricity is created in AC generators, the notion that all electrons emitted from Hoover damn over the last 100 years all came from a finite amount of electrons associated with the copper coils is erroneous. As the electron moves closer to the proton when its charge changes from either a photon, or a magnetic field it eventually returns to its original place within the orbital. This moving back and forward motion if done rapidly enough will create a electromagnetic vortex that behaves identical to a standard vortex found in smoke rings but acts as a toroid with magnetic field confining the electric field. As the electron moves the right hand rule creates another magnetic field that surrounds the original electron forming the framework for the new electron that will be as all electrons are.

An electric field contained and confined by a magnetic field around it. Both are constantly generated and renewed. While have the electric field created will be inside the core of the vortex that is essentially the electron. An equal half will not be concentrated inside the magnetic vortex and will be generated directionally in one plane outside the electron. As the electron constantly renews itself it will form a directional wave of electric field that eventually hits all angles going 360 degrees as the vortex eventually spins and rotates one full rotation. So think of an electric field being emitted by a electron similar to a radar dish sending out radar waves at the speed of light. Its directional, but since it rotates 360 degrees it eventually covers all directions as it rotates. This wave of electric field changes the charge of particles like other electrons. As the charge changes externally around the magnetic vortex it generates force somehow that drives the electrons to want to separate, or vise versa if interacting with the gravity field of a quark. Since electrons are forced to interact with the Proton's field like this, drag forces put upon the electron as it travels through the up quarks gravity field put drag forces upon the electron limiting its top velocity to around $1/137$ of the speed of light for an electron in a normal orbital for hydrogen atom; since that is the maximum velocity of a electron in its most stable configuration orbital when you set Bohr equation equal to the Fine structure constant equation ^[7]. This is the fine structure constant, its just a ratio of maximum speed the electron can travel near a proton and its maximum limit is at $n=1$, which is $1/137$ the speed of light. Hence, the speed of vortex rotation for a electron should not exceed $1/137$ the speed of light ^[4].

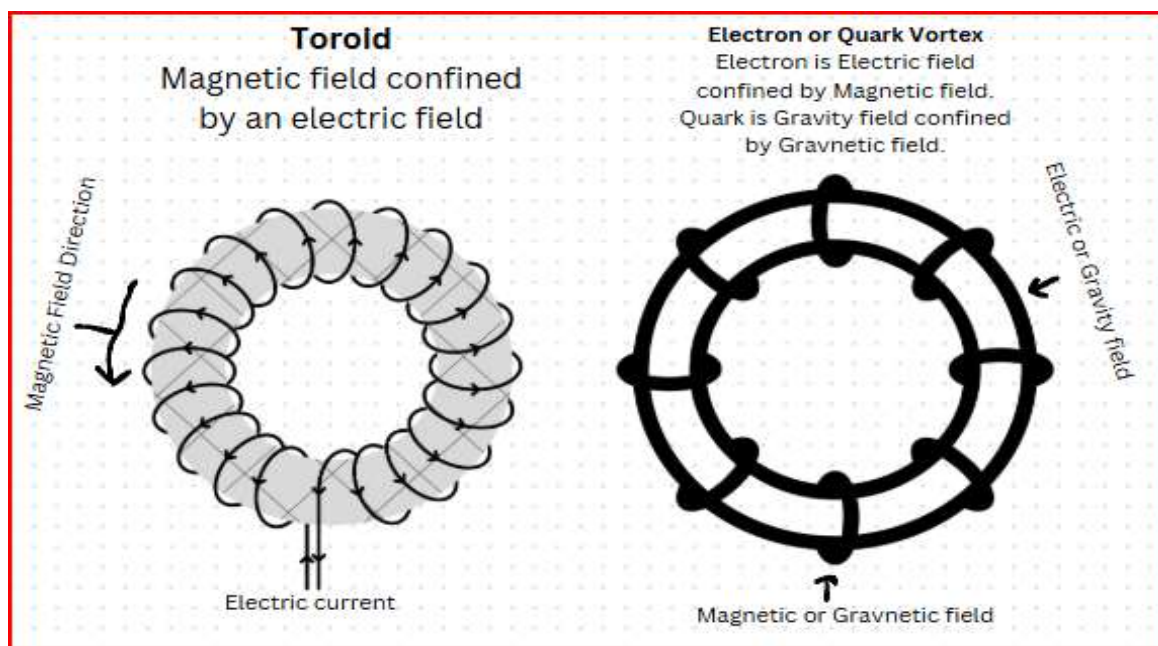


Figure 1: Showing the Structure of a Toroid and Electron/Quark Vortex

Quarks however are created through a slightly different process, while they are still vortex's like a electron. Because the quarks creation takes place almost exclusively inside a proton. And because there are 3 up quarks fighting for an electron with more energy then a proton pulls on a electron. A quark will have more energy put into its creation. This will do two things; first it will make the snapping motion of the quark occur faster, DG estimates this will be around 3 times faster spinning vorticity for a up quark then a electron. Meaning the resulting vortex will actually be more stable then an electron as the faster an vortex spins its vorticity, the more stable the vortex is. Second, it will have enough energy to move two quarks that are entangled at the same time, which will make not only a quark, but an anti-quark pair production.

The spin state of an electron or up quark is just simply the spinning and rotation of the electron or quark vortex. It seems like they are spinning because they really are spinning. But its not as simple as a spinning sphere, its the rules of a spinning vortex. And the vortex changes its size based on if anything it is interacting with it, which puts stress on the vortex that will ultimately shrink it to a point size. Where normally the spinning of the vortex's and its directional field it puts out interacts with the vortex itself as it spins and hits the center of the vortex. This will lead to the lowest energy state of the electron is when its not interacting with anything and makes almost a cloud version of a vortex.

Its time we discuss what anti-matter is, and how its created. As has been explained electrons are vortex's, up quark are vortex's, and neutrino's are also vortex's only made with a proton during a shifting nucleus from fission or fusion events. All particles are made from vortex's, and hence, so too are all anti-matter variants of these said particles. However, an electron or even quark will naturally want to shift as they are creating another electron or quark during the creation process to adhere to conservation of energy by not going against the momentum of the electron or quark. But, when you have two particles that are entangled with opposite spin states such as left/right, or up/down spins in the same orbital or place. Now you have not only opposite spinning of the vortex's but you also have the direction of their momentum as going opposite directions. This ultimately conserves the total angular momentum of the atom and its energy. When the two vortex's share the same orbital or quantumly entangle they will stack on top of each other going opposite spins and opposite directions of momentum. Which when you

overlay them together makes the vortex actually go the same spin direction allowing the two electrons or even quarks to occupy the same place. But enough energy must be put into the system first to overcome the initial repulsion of the two vortex's barriers that do not want to cross and mix. But since the overall energy state of the atom is lower when this happens, this is why atoms want to have electrons and even quarks being forced into opposite spin states. So a left spin electron will be forced into a right spin electron if its favorable for the atom as a whole.

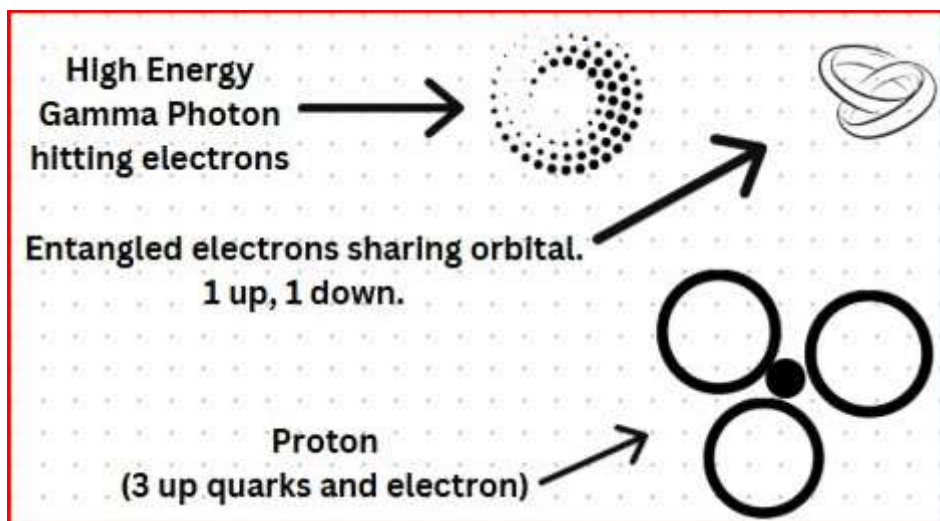


Figure 2: Showing a High Energy Photon Hitting an Entangled Pair of Electrons Sharing the Same Orbital. This Interaction Will Rapidly Move the Electron Pair from Their Position

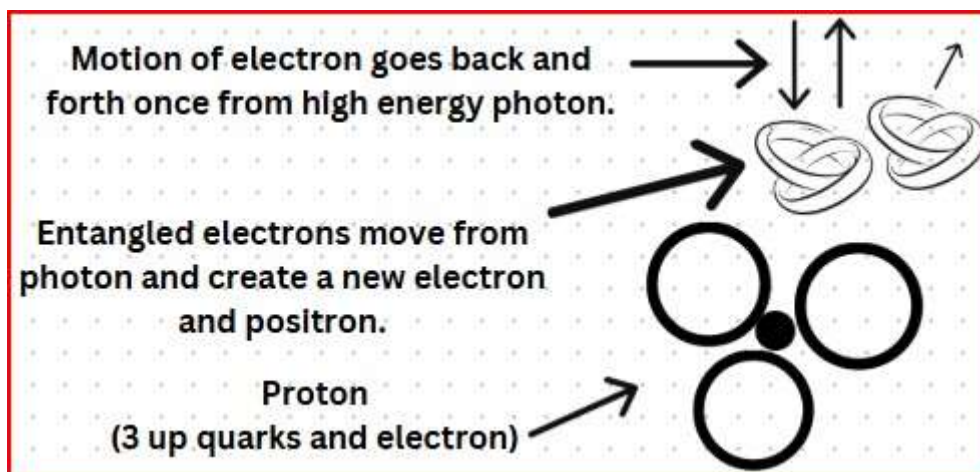


Figure 3: Shows the Motion Induced by the High Energy Gamma Photon Has Moved an Electron Its Normal Orientation to Create a Photon Or Electron. However, Since the Collision Was So High and the Motion Follows the Biot Savart Law 2 Particles Moving Create 2 Particles. The One Dragged against Its Current Creates the Positron

When you have two entangled vortex's (particles) and enough energy is used to adequately move both of them at the same time. Now you have an instance where the base vortex performs its movement adhering to the right hand rule and it creates a copy of itself. But the other vortex with opposite spin is essentially dragged against its momentum along with the base vortex the whole way. This dragging of a particle like an electron backwards against its momentum creates a negative current for the right hand rule.

Formula for charge where "Q" is charge, "I" is current, and "t" is time.

$$(1) \quad Q = I \times t$$

And as you can see, when you have a negative current, you get an negative elementary charge to go with it. So you will have a normal electron created with its normal negative charge. And a negative version that will create a positron from the reverse spin electron being dragged against its momentum. This method in action is essentially the same for all anti-matter made. For quark pair production you must first have an entangled quark spin pair in the proton, which is very rare with how chaotic the proton is internally. But sometimes everything moves in just the right way to make a up quark and a anti-matter up quark at once. Because the amount of energy needed to move a entangled up quark pair in a proton is much higher then energy needed to move a entangled electron pair in an orbital. The speed of vorticity of a electron should be around 1/137 the speed of light, while I estimate the up quark to be around 3x faster for two reasons. Firstly, DG galactic black hole theory suggest that up quarks are inherently stronger vortex's then electrons. And second, the up quark's charge is only equivalent to about 1/3 of an electrons. And a convenient explanation for this could be vorticity speed of the vortex's. Although DG admits it absolutely could be mistaken on this point of contention.

There is a massive difference between the vortex of a quark verses an electron however. Although all particle vortex's appear to follow the Biot-Savart Law which the mathematics govern both vortex's and magnetic field generation. Hence, it seems that there is simply no reason that DG is the first to purpose this simple concept of all particle being vortex's. It could be argued that String Theory was very close in assuming all particles are vibrating loops, but still plainly wrong in how they want particles to be. However, the vortex toroid of the electron and positron are both created from a moving electric charge. Where quarks are created through moving quarks made up of gravity fields. The Poisson curl of an electric field is zero just as is a gravitational field, since both are conserved in energy by nature ^[5]. Just as Poisson says that when you have a charged particle accelerating creating a magnetic field via the right hand rule, and this magnetic field does have curl. A up quark is the exact same way in this regard as the electron.

Where the up quark is actually emitting what we think of as a gravitational field just as a electron emits an electric field. And hence, when an up quark accelerates it also creates a disturbance in its emitted field that follows Biot-Savart Law ^[3] and gives this new field what DG has named a gravnetic field which does have curl. Basically, a gravnetic field contains and confines a gravity field just as a magnetic field contains and confines an electric field. And an up quark being a toroid vortex is just a gravity field contained by a gravnetic field, as an electron/positron is just a electric field contained by a magnetic field. This also means that DG must make a small correction from its last published paper ^[2], where it says that gravotons which are low intensity potons that actually carry the force of gravity. While the exact nature of all potons is unknown in all ways currently and this could still be true. It does appear now with this new revelation that the force of gravity field is simply being emitted from the up quark as it perpetually sustains itself via its vortex vorticity. And as in the electron, its a directional wave front of field energy pushed out at the speed of light as the vortex cycles. And eventually as the vortex makes a complete 360 degree rotation which occurs at up to 2% of the speed of light, it eventually broadcast this directional field omni-directionally in all directions with a full rotation of the vortex.

Electron capture is when an atomic proton eats an inner orbital electron. Because the state of the proton changes from having 1 down quark and 2 up quarks changes to 2 down quarks and 1 up quark. The atomic nuclei shifts to find equilibrium and account for the proton shift to an neutron creates an neutrino from the proton shifting. Since the shifting of protons during any

fission or fusion process can only change in one direction from the nuclei's orientation, all neutrinos can only have left handed chirality ^[2].

In Beta Plus Decay is the nuclear process where an proton captures an unknown electron, and there is a positron emitted from the reaction. So what is happening here is a whenever an atom has an unnatural amount of protons or neutrons that puts internal stress within the nucleus of the atom. This stress drives Beta Plus Decay process in that there are too many protons pulling on the entangled electrons and wanting to interact with him inside the neutrons. Eventually a proton will get lucky and get close enough to the entangled pair of electrons inside the neutron and pull it towards its positive gravity field with just enough force that as the entangled electron pair inside the neutron get pulled far enough out of their position and then back into it from equilibrium; then we now have satisfied all necessities to create a electron/positron pair production. Only because this pair production occurs deep inside the nucleus of the atom the electron generated is immediately sucked up and eaten by a proton converting it into a neutron. The positron makes it out of the atom where it reacts with the first thing that touches it. The atomic core shifts now that the ratio of protons and neutrons has changed and this shifting creates a neutrino. So to summarize this reaction emits a electron, positron, and neutrino. But the electron is consumed immediately to convert the proton to an neutron.

In Beta Minus Decay there is an neutron that is turning into a proton releasing a electron and anti-neutrino. What is happening in this reaction is a neutrino makes a direct hit and interacts with the entangled electron pair inside a neutron within its nucleus. Pontificate upon this, it is known knowledge in the world of DG that neutrinos contribute to essentially all nuclear element decay ^[2], it is not random. But since all neutrinos have the same left handed chirality from their creation and the only viable orientation of a nucleus in relationship to its surrounding electrons. This means that the neutrino will only interact with the left handed electron in the entangled pair inside the neutron. The neutrino will essentially bump the left handed electron out of the entangled pair ejecting it from the atom all together and converting a neutron into a proton in the process. The anti-neutrino DG struggles to adequately explain. As from our infrastructure constructed in DG to explain the created of anti-matter we know that somehow a charged vortex particle must be dragged against its momentum to create a negative current effect of sorts to reverse the polarity of the particle. But it is also known that the orientation of the nucleus only allows neutrinos to have left handed chirality. So all DG can say at this time is somehow this specific process forces a proton during its creation to go against its momentum to create an anti-neutrino as compared to a standard electron neutrino.

How does all this explain the double slit experiment the question must be asked. Its actually remarkably simple to explain the double slit experiment results when electrons and quarks are both just vortex's. As the vortex spins and pushes out its external field directionally as it spins to hit all angles. It hits the inner portion of the vortex as the spin goes around, and the negative external field projected out of the vortex hits the inner part of the vortex and pushes it out to equilibrium. This equilibrium appears to have the limit of around the size of an atom for an electron. It is unknown for an up quark as they don't travel solo like electrons do, so they are always being interrogated by something if not by another pair quark. But we can say that if an electron is not being interrogated or interacted or measured by anything then it will find its equilibrium and be a giant vortex the size of an entire atom itself.

The vortex will be so large that it will resemble a cloud very similar to how quantum mechanics thinks of as electrons. But once the electron interacts or is measured by something, the stress and forces exerted upon the electron will change its equilibrium to as small as a point particle how classic physics thinks of as an electron. Electrons naturally when left alone want to travel

the speed of light, the speed of propagation though mechanics that DG cannot confidently identify at this time. But once the electron interacts with other particles or fields it will shrink in size and speed until it reaches equilibrium for whatever instances it encounters. Naturally this model of electrons and how quantum entanglement works means that the hidden variables theory of quantum entanglement is correct. However, since there are various methods that can be employed to change the spin states of electrons absent its natural process in an atomic orbital. It is still possible that the actual spin state is somehow changed during relevant events. But this does not seem to be the case regard experiments like the double slit or Bell's Theorem. So ultimately there must be an error in the Bells experiment assumptions somehow.

2.0 CONCLUSION AND RECOMMENDATIONS

Conclusion

This paper has explained how the universe must operate if Dynamic Gravity is true. Down quarks must be just an up quark that ate an electron. All energy from the atom must come from outside itself. And an electron is the highest energy form of an photon. If these parameters are correct that we can confidently assume that neutrinos are created from protons. That all known elementary particles are essentially vortex's that follow the Biot-Savart Law. And that all process making pair production anti-matter must somehow involve an entangled pair being rapidly dislodged and returned to its original place within the atom. An explanation for all forms of anti-matter generated are explained in great detail. And this vortex nature of particles is used to explain the results of the double slit experiment.

Recommendations

The math of Dynamic Gravity has already proven perfect ^[1]. The recommendations of the author are in advancing all known science is a call to researchers to explore how G, the gravitational constant changes from source to source of dense matter from lead to gold. For according to General Relativity it does not. And according to Dynamic Gravity, it defiantly does, even if ever so slightly in non-super celestial objects. Only one can be right, and yet still to this day all G experiments are performed on lead exclusively for the claim of its too hard to measure with other metals under the false assumption that G is universally equal to all matter.

Another recommendation of the author is to study the beta plus decay process with all elements possible in hopes of narrowing down the exact entangled pair of electron shell that are creating the electron/positron pair. There are current techniques that can induce positron/electron pair production such as collision of gold atoms in accelerators ^[9]. This experiment would appear to suggest that the pair production is coming from an outer entangled pair. Where beta plus decay seems to suggest the entangled pair is much closer to the nucleolus since it interacts with it.

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