

OUR UNIVERSE , CAUSE AND EFFECTS ,SEARCHING FOR A  
FUNDAMENTAL AND THE MECHANISM OF GRAVITY.

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Abstract:.....

Standard model given us a basic understanding of twelve matter  
carrying fields and four force carrying fields to visualize actions and  
reactions in a quantum vacuum field of HIGGS FIELD  
LHC detected Higgs field and a Nobel prize was given.  
But we are not sure about the kind of HIGGS as described in standard  
model and a lot of questions cropping up.  
It is clear from standard model understanding that our universe is a sea  
of many matter and force carrying fields swirling and whirling as an  
exotic super fluid which I named gravitoetherton super fluid.  
There is no reason to believe that this field density should be isotropic  
as prescribed by Einstein as COSMOLOGY CONSTANT. So quantum  
vacuum is basically a bubbling froth/entity, where the drama of all  
interactions take place . We also think that virtual particles appearing  
and disappearing to keep the account clean in calculations of QCD/QED  
from Fdiagrams.....

But the greatest puzzle of 120 order magnitude remains without any  
satisfactory explanation. Under such basic assumptions and a  
standard model along with probabilistic quantum physics , we are  
searching for a theory of everything without explaining the concept of

vacuum . Einstein postulated speed of light constant in such dynamic non isotropic medium ,which we do not understand properly. Real vacuum or complete void may be possible somewhere in the universe but there is no reason to assume that light propagates in such absolute nothingness.

Some new ideas and NEW PHYSICS is required to go beyond and accepting that neither SR and GR of Einstein can be taken for granted . So what I will be discussing now may look as not following current frame of physics and even some imagination to be checked in further experiments in LHC.....

What is gravity? Where are the gravitons? Newton prescribed gravity is a force of attraction between masses but Einstein conceived a picture of curved space-time to appear as gravity.

Though Einstein rejected the requirement of ether from MM experiment but failed to explain why space-time will curve. But his equations to balance the force of the universe due to gravity required a fudge factor named cosmology constant to describe static or expanding universe.....

And the mechanism of gravity remained unknown. ACTUALLY GRAVITY IS NEITHER FORCE AS DESCRIBED BY NEWTON ,NEITHER CURVATURE OF SPACE-TIME, BUT AN EMERGENT PHENOMENA DUE TO PUSH OF FERMION GRAVITONS ON MOLECULES OF MATTER. AS SUCH GRAVITY IS GRAVITATIONAL FLOW SUBJECTED BY THE DIRECTION OF FLOW AND CONCENTRATION OF FERMION GRAVITONS IN GRAVITOETHERTON SUPERFLUID WE CALL SPACE.

Modern physics considers graviton as mass less spin 2 exchange type particle in standard model . Gravitons have not been seen so far and a quantum theory of gravity or emergent gravity model etc are popular which may not be true . There is no accepted point of view in gravity mechanism due to lack of data. In the year 2002, I published a few papers namely, 1// ETHER=GRAVITY=DARK ENERGY THEORY OF GRAVITOETHERTON SUPER FLUID UNIVERSE. .2//BALLOON

INSIDE BALLOON THEORY OF MATTER AND ANTIMATTER UNIVERSES ON OPPOSITE ENTROPY PATH AND REVERSE ARROW OF TIME.

I imagined our matter universe inside an antimatter universe on opposite entropy path and reverse arrow of time giving rise to a re bounce ,re cyclic scenario instead of a BIG BANG.....

The common boundary of these two universes is violent due to annihilation of matter and antimatter where an exotic mixture of some force carrying particles as well as quarks are generated and injected into both the universes for growth. Long after we even got some indications of a parallel universes in dark flow or darkpull.

Now the question of what is fundamental is being discussed in science forums and I beg to state that the situation when one universe in my theory reaches a very low entropy, a BIG BOUNCE will give Dr. Guth an exponential inflation. The most fundamental is the force of rebound and this force will decide the configuration of quarks , namely TeTRA QUARK OR PENTA QUARK etc etc giving the laws of nature accordingly to manage the situation afterwards. I do not have a good mathematics for describing how the tetra quark or penta quarks form , from the initial BIG BOUNCE OR EVEN THE LAWS OF NATURE. Then we know as happened in our universe of galaxy formation around escaped evaporation black holes from previous era as seeds –may be after 400000 years . The evolution of our universe thereafter is described in our model . I WILL NOW EXPLAIN THE THE SWIRLING AND WHIRLING , FLOWING ETC ETC OF THIS GRAVITOETHERTON SUPERFLUID WHICH EINSTEIN DESCRIBED CURVING OF SPACE-TIME. The two most important constituents in gravitoetherton super fluid are FERMION GRAVITONS FOR NEWTONIAN GRAVITY AND BOSON GRAVITONS FOR STRONG NUCLEAR FORCE in proton pulp atomic model. .

Let me stress here that gravitoetherton super fluid is non isotropic field density due to concentration of gravitons. In my theory, the fermions gravitons have a mass of 750 proton mass,calculated from the observed acceleration due to gravity on earth surface. These FERMION GRAVITONS are very very small in size but heavy and only effect is gravity push towards its direction of flow. On earth surface the fermion gravitons are flowing like arrows towards center of earth and pushes all molecules so that there is equal fall of heavy or light molecules.

The fermion gravitons are gradually getting concentrated as it flow towards center of earth. THE SPHERICAL AREA GETTING REDUCED BY A FACTOR  $1/R.R$  WHERE R IS THE DISTANCE FROM CENTER OF EARTH. THEREFORE THE MOLECULES MUST ADJUST SIZE FROM THE CENTER OF EARTH TO SUSTAIN A CHANGING FORCE ON IT FROM FERMION MOLECULES FOR A EQUAL FALL. ALL MOLECULES FALL EQUALLY ALSO AVOGADROS THEOREM IS VALID. THEREFORE AS ALL MOLECULES HAVE DIFFERENT MASS AND VOLUME , WE CAN DERIVE THAT  $M/d.d$  FOR ALL MOLECULES MAINTAINS CONSTANTCY FOR EQUALL FALL. HERE M IS MASS AND d is diameter OF ANY MOLECULE AT ANY PARTICULAR HEIGHT. BUT AS THE MOLECULES FALL , WE OBSERVE THE PUSH OF FERMION GRAVITONS INCREASE ,SO THAT DIAMETER OF ANY MOLECULE DECREASE TO MAINTAIN THE RELATION..FORCE=MASSXACCELERATION.

..... THIS IS PUSH GRAVITON THEORY. IF WE WISH, WE CAN REVISE NEWTON AS  $F=P.G.M.m/r.r$  where P is space graviton concentration factor. The center of earth is getting focused fermion gravitons giving a molten magnetic core. Now the galactic rotation curves as observed by Dr.Rubin is explained . The galaxy disk of gravitoetheron superfluid is rotating as a CENTRIFUGE , thereby the FERMION GRAVIONS are locating more and more from the center of the disk towards periphery allowing the outer stars to rotate as observed defying Newton.

So standard model description of graviton is wrong and soon we will find a heavy particle having 750 proton mass to qualify for FERMION GRAVITON. As such the mystery of DARK MATTER is solved as FERMION GRAVITONS ARE DARK MATTER IN ITSELF.....

From this discussion it is obvious that in a chanced BOUNCE with right jerk force of BOUNCE , we will get right balance of quark configuration and consequent natural laws to allow formation of universe with tuned laws and configuration of quarks in matter formation so that a planet like earth may develop to harbor intelligent life to ponder about our universe and the question –What is FUNDAMENTAL.

Modern physics had a hard time in describing the space around us and with the concept of great AETHER. The question of absolute void ,, devoid of anything , any matter, any force any dynamism but absolute dead lifeless entity of absolute nothing was the point of consideration and many debates were arranged without

any absolute judgement.....

In the days of NEWTON , light was considered waves and as a result , we assumed something omnipresent as ETHER. But when Einstein developed photoelectric effect theory, the light was also considered as photons flow . The double slit experiment given us many new realities of nature and the wave particle duality of light as well as matter particles cant not be properly understood if we do not understand the space around us where all the drama of events taking place .

On the other hand , we know how quantum physics considers vacuum as frothing bubbles of something which is highly dynamic giving birth and death of virtual particles so that calculations in QCD/QED keep the account clean in quantum physics. Casimir effect was also known . Dark matter and dark energy was also discovered from cosmology observations . Soon Higgs boson was also seen in LHC and standard model came to a point when the total seventeen fields of standard model failed to describe what is all these dark energy and dark matter or even what is the mechanism of gravity. The COSMOLOGY CONSTANT idea of Einstein soon proved basically wrong because there may not be any constant nature of these strange dark behavior in accelerating expansion of the universe.....

We can not also assume that vacuum has energy which is getting increased by expansion of space not diluting though volume increasing further with constant nature as prescribed by quantum physics. Everything now in doldrums indicating a NEW PHYSICS necessary. ....

All our considerations in MODERN PHYSICS when there is a mismatch of 120 orders of magnitude in our calculations should now be discussed in developing a NEW PHYSICS. In the year 2002, I established a research named –HOME RESEARCH ON GRAVITOETHERTONS on my own and published few papers namely---ETHER=GRAVITY=DARK ENERGY THEORY OF GRAVITOETHERTON SUPERFLUID AS NON ISOTROPIC SPACE AROUND US. And BALLOON INSIDE BALLOON THEORY OF MATTER AND ANTIMATTER UNIVERSE ON OPPOSITE ENTROPY PATH AND REVERSE ARROW OF TIME. Etc etc

The main idea was to look for a new vision beyond SR and GR of EINSTEIN and highlighting the flaws in quantum mechanics.....

The gravity was relooked as emergent phenomena due to presence of FERMION GRAVITONS push in the direction of flow on matter molecules . It was calculated from molecules fall rate which is acceleration due to gravity by the push of fermion gravitons flowing as arrows to wards center of earth. Thus fermion gravitons were found 750 PROTON MASS and as such dark matter in itself. Newtonian gravity is not a fundamental force but emergent phenomena. Even the theory suggests that strong nuclear force is also emergent phenomena due to BOSON GRAVITONS . Further PULP PROTON atomic model suggests that nucleus of atoms is basically a cloud of positive charge waves around central core neutrons giving a new look to strong nuclear force and action of gluons which is boson gravitons on quarks. ..

These are some of the developments to discuss and develop NEW PHYSICS with the help of LHC.

There is no doubt now that basic fundamental quarks and the entity named charge –positive or negative which culminates in even color charge in quarks formation are not understood from quantum physics and all rest phenomena like magnetism etc are emergent from fundamental. I am not from physics community but with some basic knowledge, I can see that standard model though very successful and theories of Einstein though revolutionary , we have to further work without the concepts of EINSTEIN but a new look of an exotic medium like gravitoetheron super fluid consisting of many exotic force carrying and matter carrying particles we call space and the dynamics may be super fluidic entropical jumps on local variable time based on local gravity potential and relative speed of reference frame . Here the broad ideas of time is coming into consideration. We have to detach time from space-time concept of Einstein. Time is not absolute and relative point to point . Time is just a measurement of that variable at that point in space due to gravity potential and relative speed of that reference point. There is nothing absolute in our universe as all are in constant dynamism and measurement is just a local phenomena and as such time dilation is actually measurement dilation . There is no point in philosophical discussion on time as it is a variable at any space point and we are measuring everything relatively at that point and even time can totally vanish due to no entropical march point to point.. At any point in space ., time is snap shots of events on entropical as well as gravity

based dance on Planck time obeying quantum laws of uncertainty but I BELIEVE THAT A CAUSE AND EFFECT EXIST ,SO THAT FUTURE IS DETERMINISTIC . We can not totally disregard cause and effect though there may not be possible to exactly know all cause and effect . Quantum physics will be further developed to take care of cause and effects.