

QUANTUM FOAM AND VACCUM ENERGY

CATASTROPHE.....

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...ABSTRACT::--

The greatest puzzle today is dark matter,,--dark energy,, and mechanism of gravity.

We are living on a planet which is located in a part of our universe of super cluster , which is under dark pull/flow from another universe giving drift velocity from existing universe. This

has affected our observations by telescopes in the form of incorrect red shift and calculations . Our universe is expanding and accelerating but at reduced rate from our calculations.

Another

factor is due to our matter universe inside an antimatter universe on opposite entropy path and reverse arrow of time creating GRAVITOETHERTON SUPERFLUID at common boundary by annihilation and injected into both the universe as explained in my balloon inside balloon theory.

The outer universe will be approaching a low entropy when disbalance will give rise to a BIG BOUNCE creating again mirror universes in recyclic and rebound theory.....

WHAT WE CALL DARK MATTER AND DARK ENERGY MAY BE A SINGLE SUPERFLUID CONTAINING MANY EXOTIC PARTICLES AND FIELDS WITH THE POSSIBILITY OF NEGATIVE MASS PARTICLES WITH MONO MAGNETIC COUPLING. THIS SUPERFLUID IS KNOWN AS GRAVITOETHERTON SUPERFLUID FROM MY BALLOON INSIDE BALLOON THEORY. AS THIS SUPERFLUID IS CONSTANTLY

VIBRATING DUE TO UNCERTAINTY PRINCIPLES AND SWIRLING, WHIRLING AND FLOWING LIKE A VISCOUS FLOW FOLLOWING NAVIER STOKES, WE MAY ALSO USE FLUID DYNAMICS ALONG WITH TENSOR FLOW AND QUANTUM FIELD THEORY FOR THE FIELDS.

THEREFORE OUR SPACE IS MORE DYNAMIC THAN JUST A CURVATURE OF SPACE TIME AS EXPLAINED BY EINSTEIN FOR GRAVITY EFFECTS.

.....Let us not forget that this superfluid contains 125 proton mass HIGGS BOSON making it viscous for creating mass in elementary particles as well as 750 proton mass FERMION GRAVITONS which is flowing with a direction to bang the molecules so that apples fall or planets rotate around sun. OTHER EXOTIC PARTICLES ARE YET TO BE THEORIZED AND SEEN IN LHC EXPERIMENTS. The most important behaviour of this dynamic fluid is what SCHRODINGER FORMULATED in his wave equation , simply by deriving a sinusoidal wave from a vibrating string . When de BROGLIE APPLIED IT ON MATTER WAVES , IT BECAME COMPLECATED. I have shown an associated matter wave will only carry half of the particle velocity and as such lagging behind. THEREFORE I SAID THAT THERE IS A PILOT WAVE GENERATED FROM THE JITTERING SUPERFLUID FROM UNCERTAINTY PRINCIPLES, WHICH IS REFLECTED FROM SCHRODINGER WAVE EQUATION . ALL ENTITIES ARE DANCING IN THIS SPACE WAVES KNOWN AS PILOT WAVES AND APPERAING AS WAVICLES. THOUGH THE ENTITIES HAVE CLEAR IMAGE BUT DUE TO THIS BED ROCKING , WE PRESCRIBE WAVE PARTICLE DUALITY .

..... Therefore gravity mechanism is an emergenet phenomena due to directional pressure by fermion gravitons on matter molecules. Another emergent phenomena is STRONG NUCLEAR FORCE due to BOSON GRAVITONS gluing quarks when available . Here again fine tuning of the fields of boson gravitons decides the three quarks configuration. But we can devise methods for pentaquarks formation which will not stable. These boson gravitons due to huge hidden energy can participate in accelerating expansion of our universe and create a 120 order mismatch in our vacuum energy calculations.

The question of fine tuning is obvious when so delicate balance of not only HIGGS FIELD but also STRONG NUCLEAR FORCE provide the background for

matter formation giving mass. We always wonder why the laws and constants of nature as well as strength of gravity and strong nuclear force along with higgs fields are so delicately fine tuned and balanced. Our standard model may invoke a feeling of amazement, but who knows that there may be many more configurations providing the background for many more universes. We are in this universe where things are as happened in the BIG BOUNCE and these bounces are infinite times in infinite backdrop of infinite multiverse. Basically there is no design, but only chances and infinite possibilities of laws and constants.

PLEASE DO NOT GET CONFUSED BUT THIS IS REALITY AND WE DO NOT KNOW HOW TO PROVE IT.

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This BIG BOUNCE is described by Dr.Guth in his exponential inflation. After around 380000 years, we will see CMB glow and galaxies will be forming around escaped evaporation black holes from previous era as seeds of galaxy formation. That is why we see black holes in every center of galaxy and much older than the life of our universe. CMB glow also shows circles of the bounce and BICEP-2 also carries some foot prints. Therefore this injection of gravitoetheron superfluid is our expanding space swirling, whirling, flowing as CURLS AND DIVERGENT VECTORS MORE SPECIFICALLY TENSOR FLOW IN 4 DIMENSIONS OF SPACE-TIME which Einstein described as SPECIAL AND GENERAL THEORY OF RELATIVITY WITH THE ASSUMPTION OF GRAVITY DUE TO CURVED SPACE-TIME..

This is what we refer as quantum foam in quantum mechanics. There is nothing like empty space in our universe but the distribution is non isotropic field density point to point in space-time.

Many exotic particles/fields constitute the SPACE FLUID where fermion graviton with mass and boson gravitons giving strong nuclear force for quarks will be detected soon. Gravity as well as strong nuclear force both are emergent in nature and not fundamental.

Boson gravitons are having by nature strong force to glue quarks if the quarks are available. Otherwise it just participate in expanding our universe. That is why

we see 120 order mismatch in our vacuum energy calculations. On the otherhand, we see that as the galaxy disc is rotating, the centrifugal force throw the massive fermion gravitons away from center of galaxy giving greater concentration at outer periphery, so that outer stars rotate defying NEWTON. So we have to write the

equation as $F = P \cdot G \cdot Mm / R \cdot R$ where P is space graviton factor index.

Now we know that fermion gravitons are flowing like raindrops on earth or we may say flowing like arrows towards center of earth. Earth center is becoming very hot with molten iron for creating a magnetic dynamism

All molecules on earth are subjected by the push of massive gravitons so that apples fall and as Galileo first noted that all molecules heavy or light fall equally . That means we can say that as area of a sphere varies by $1 / R \cdot R$, so the force of gravity will also depend on the proximity of gravitons changing by a factor $1 / R \cdot R$ as the concentration increases towards center. It is obvious that for falling

equally, we have to say that $M / D \cdot D$ of any molecule is constant at any particular height where D is diameter of any molecule and M is mass.

We have seen air bubbles change diameter as it comes out from bottom of a pond to the surface due to gravity potential .

Some calculation suggest that fermion gravitons must be having 750 proton mass .

I do not think that fermion gravitons have negative mass as it will create mess in quantum calculations of virtual particles at quantum foam in QED and QCD.

But more discussions may clarify the matter further from renewed experiments.

The concept of time in relativity and quantum mechanics is definitely creating all our conceptions in REALITY diluted.

Our universe is ever dynamic without any absolute rest frame and as such all frames are relatively dynamic and Einstein talks of a time which is measured time varying from frame to frame. Example we can say that if our heart beat count one minute then at sea level it may be 70 but on a hill it will be say 72. As such here one minute is diluted due to less oxygen in air giving 70 or 72 beats. Therefore the concept of time is measurement time and not ABSOLUTE TIME. As such ABSOLUTE TIME IS THEORETICAL CONCEPT which NEWTON prescribed. But all quantum processes follow absolute time but the measurement dilutes it in atomic clocks. Therefore there is no possibility of marrying quantum physics with relativistic calculations. We have already seen how relativistic calculation in quantum physics by Dirac, Heisenberg and others created all conceptual difficulties of uncertainties but Einstein said that GOD DOES NOT PLAY DICE. Actually we do not know each and every hidden variables in each point of the universe and as such initial conditions dictating the outcome.... quantum outcome of quantum processes . But propensity of processes follow a pattern if we look at many outcomes in probabilistic theory as we also see in flipping of

coins.

Though each quantum outcome is different due to changing dynamic hidden variables but we must say it follow a cause and effect in each outcome . The initial conditions are so dynamically changing in a narrow range but probailistic many outcomes can give a pattern for our understanding. Therefore Einstein is correct in saying God does not play dice. We can not

not say that GOD IS PLAYING DICE.

TIME IS GREAT CONFUSION IN MODERN PHYSICS.

The understanding of reality is our perception in this infinite universe of infinite balloon inside balloon of matter and antimatter on opposite entropy recyclic, re bounce and every epoch give a set of laws and if the laws are benign then intelligent creatures may live on a earth like planet to ponder about the universe. One most interesting phenomena is that the laws of nature has a propensity for construction which give a chance for formation of structures and creatures and life and may be that is our GOD.

.....The time and space should be regarded as ABSOLUTE as prescribed by NEWTON for developing corrections in QUANTUM PHYSICS. The space we see is a part of our universe in a multiverse which has no limit . As

such space should be considered as container and absolute filled with non isotropic gravitoetheron superfluid swirling, whirling , flowing etc etc and all objects and entities are immersed in it . Everything like fish in water. TIME IS A LOCAL VARIABLE IN THIS SPACE AS PRESCRIBED BY EINSTEIN WHEN WE MEASURE IT. Our concept of time is a dilated measured time which is an illusion of absolute time. PLATO DESCRIBED THIS ILLUSION OF OBSERVATION IN HISALLEGORY OF CAVES STORY.

Einstein only mentioned about this variable time in respect of reference frames and effect of gravity in his time dilation theory. GPS SYSTEM PROVES EINSTEIN SO WE ARE CERTIFYING EINSTEIN. The problem is that our universe is everdynamic without any absolute rest frame . We can not measure absolute time except in theoretical calculations and understanding. But we can not ignore ABSOLUTE TIME in quantum calculations .

Einstein postulated about speed of light which he considered about the smeared electromagnetic waves and not photon by photon with a specific time of exit tag from the source. This thinking gives the speed of light same by all inertia frames observers which contradicts GALILEAN TRANSFORM FROM SIMPLE LOGIC. But can we say that

in reality the Galilean Transform is violated.. if we consider light as a flow of photons with different exit time tags for each photon.

Here the trick of applying Lorentz Transform and

surely the observations of smeared EM waves light by instruments also certify the Relativity theory of Einstein. AS SUCH WAVE PARTICLE DUALITY HAS GIVEN OUR MODERN PHYSICS .. AN ILLUSION OF DUALITY AND UNCERTAINTY WHICH EVEN FEYNMAN FAILED TO UNDERSTAND.

Therefore WE HAVE TO DISCUSS MODERN PHYSICS IN THE RIGHT PERSPECTIVES BEYOND RELATIVITY THEORY. There is even no reason that information can not flow faster than speed of light . Speed of light is due to MAXWELL ELECTROMAGNETIC THEORIES BUT INFORMATION IS CARRIED/PROPAGATED BY ANOTHER KIND OF WAVES WHICH IS CONSCIOUSNESS WAVES OF OBSERVERS AND THAT IS MUCH FASTER THAN SPEED OF LIGHT. THERE IS NOTHING MAGIC IN QUANTUM ENTANGLEMENT OR OBSERVERS EFFECT IN QUANTUM PHYSICS.

OUR IDEAS MUST DEVELOP FURTHER TO GO BEYOND EINSTEIN AND STANDARD MODEL. THE EFFECT OF OBSERVING IN QUANTUM PHYSICS SHOULD BE FULLY EXPLORED BY FURTHER RESEARCH ON CONSCIOUSNESS.

How our consciousness take a physical shape in the form of propagation at a speed much higher than speed of light is being investigated .We must admit that relativity theory can enforce limit on the speed of light but information can propagate much faster than speed of light and Einstein must be wrong in saying that nothing propagates faster than speed of light..

.....Quantum mechanics describe the interactions at the subatomic scale of atoms and molecules set against the background of gravitoetheron superfluid which is supplying the virtual particles which is applied in QCD/QED calculations of Feynman..Obscure wave function of Schrodinger and further extensions to matter waves by De Broglie can not be a real quantum world interpretation but an way of coding our observations in subjective beliefs for an abstract quantum description on the wave function .Then do we have to abandon cause effect in all such fantasies in quantum entanglement or probabilistic interpretation of Copenhagen lobby or should we try to explore hidden variables as prescribed by Einstein? The main difficulty here is time taken for Quantum calculations from relativistic approach is creating errors from time dilation and the dynamical system of space-time is changing point to point in space creating the birth of quantum effects in chaotic determinism of highly sensitive in hidden conditions of variables giving output of an illusion of disobeying cause and effects. We deal with the probabilities as described by Max Born for an interpretation always undergoing a feed back loop patterns for a stastical outcome of all such disorganized cause and effects for a pattern which is verified by quantum experiments . The probabilistic wave which is nothing but a deterministic chaos due to a very inherrent law of nature which we may call propensity for reconstruction even under second law of thermodynamics. That is why we see chaotic determinism even in extreme conditions of emerging life from uncertainty .The out come of natural laws also is due to this propensity of reconstruction in a pocket of

the multiverse where Higgs field is just appropriate with a benevolent tuning for evolving natural laws which we normally think that never changing. We are blessed with the benevolent natural laws with fine tuning at this juncture of infinite time and our goldy lock position of planet earth and many accidents on earth wiping out very big animals so that a suitable life can form for intelligent beings to ponder about our existence .

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SUGGESTIONS TO RELOOK ON OUR EXPERIMENTS: -DOUBLE
SLIT EXPERIMENT WITH ELECTRONS ONE BY ONE CAN EVEN RESULT INTO AN
INTERFERENCE PATTERN , JUST BY DEFLECTING AT THE EDGES FROM A CASIMIR
EFFECT /ELECTRONIC REPULSION FROM ELECTRONS ON THE METAL WALL. THE
ELECTRONS PASSING BY TOUCHING THE EDGE BOUND ELECTRONS OF MOLECULES
MAY DEFLECT THE PATH OF THE ELECTRON. BUT
CHANGE OF PATTERN FROM OBSERVATION EFFECT MAY BE EXPLAINED BY MERE A
MEANS OF AVOIDING THE EDGES DUE TO PHOTONIC INTERVENTION NOT ALLOWING
THE DEFLECTION OF PATH . WHENEVER ANY
PARTICLE MOVE , IT IS ALSO ENGULFED WITH A PILOT WAVE GENERATED
FROM THE JITTERING OF THE SPACE AS DESCRIBED BY SCHRODINGER AND
HEISENBERG . SO AS A MATTER OF FACT THE WHOLE SPACE AS SMALL
AND BIG INTENSITY WAVES ARE MARCHING ALONG WITH THE PARTICLE.
BUT HOW THE OBSERVATION COLLAPSE THE PILOT WAVE ALSO IS TO BE
UNDERSTOOD. THE PHOTONIC INTERVENTION BY MERE ACT OF
OBSERVATION STOPS THE PARTICLE TO DANCE GIVING A DEFINITE PATH.
ENTANGLEMENT MAY BE EXPLAINED BY INSTANTANEOUS INTERACTION OF
LATTICE NEIGHBOURING PAIRS IN TENSOR FLOW OF INFORMATION FROM POINT TO
POINT ON ABSOLUTE THEORETICAL TIME CREATING AN ILLUSION OF
ENTANGLEMENT IN DILATED OBSERVED TIME.

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.THEN IF RELATIVISTIC TIME CAN NOT BE APPLIED FOR IN SUCH DELICATE QUANTUM
TENSOR NETWORK FLOW OF PROPAGATION IN ABSOLUTE TIME OF LATTICE
INTERACTING IN ALL DEGREES OF FREEDOM IN THIS DAMN DAMN BIG HILBERT
SPACE CREATING ALL SUCH EFFECTS OF ENTANGLEMENT KEEPING CAUSE AND
EFFECTS , WHERE WE MAY SOME DAY DERIVE A BETTER THEORY FOR QUANTUM
REALITY ... WE HAVE TO UNDERSTAND GRAVITOETHERTON SUPERFLUID AND
THE ASSOCIATED PILOT WAVES AS GUIDE WAVES FOR ALL ENTITIES AS
EVERY ENTITY IS LIKE FISH IN JITTERING WATER.
ACTUALLY , WE ARE BOUND BY OUR STANDARD MODEL AND RELATIVITY
THEORIES ALONG WITH COPENHAGEN INTERPRETATION OF QUANTUM PHYSICS.
WE ARE TOO MUCH WORRIED ABOUT FINE TUNING AND OBSERVER EFFECTS
BY MORPHISM AND BIO CENTRISM . WE ARE EVEN READY FOR ABANDONING
CAUSE AND EFFECTS . THE MULTIVERSE AND MANY
POSSIBILITIES MAY LOOK LIKE ANTHROPIC SOLUTION BUT THERE ARE MANY
FINE TUNINGS POSSIBLE FROM MY THEORIES TO GIVE STRUCTURE AND LAWS
WITH MANY TYPES OF LIVES APART FROM CARBON BASED .
THE MULTIVERSE IS A KALIDOSCOPE OF MANY PATTERNS AND MANY

POSSIBILITIES AND MIND BOGGLING WHEN IT CAN BE INFINITE.

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