

EMERGENT GRAVITY WITH TWO KINDS OF GRAVITONS –FERMION GRAVITON WITH MASS FOR A MOLECULAR CLASSICAL GRAVITY AND A MASS LESS BOSON GRAVITON FOR A QUANTUM LEVEL ACTION ON QUARKS FOR A STRONG NUCLEAR FORCE.

Durgadas Datta

India

durgadas.ddatta@gmail.com

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PAGE-ONE.

Abstract:

Our universe with five percent matter and remaining dark energy and dark matter is a profound realization of modern astronomy throwing modern physics in big crisis with a number of questions. Are we comfortable with relativity and gravity theory of Einstein? How gravity mechanism can be explained? Can we say that dark energy is having direct link with gravity mechanism? Do we have to revise atomic model without strong force? Then can we prove that all remaining three forces are electromagnetic due to mono magnetic coupling in dark energy gravitons? How all the molecular couplings are same to cause equal fall of Galileo or equal number of molecules from Avogadro. Is equivalence principle is local phenomena or universal? Chemistry may not be possible in many parts of our universe due to non applicability of Avogadro law. Any correction required in number of quarks due to revision in standard model without strong force? All these issues can be taken up by LHC for further exploration and I tried to give some proposals in my essay in describing how our universe can be viewed from big bounce to present day and some analysis of modern idea of Dr.Guth's exponential inflation at the time of big bounce as well as interpretation of BICEP2 .

Essay:

When we look at the history of developments in modern physics, we are at a loss to answer many basic issues left unattended. The mechanism of light propagation was not fully understood from double slit experiment and Einstein developed his theory on photo electric effect by assuming photons as flow like bullets without the need of any medium. The wave of electromagnetic in a medium called ether was popular but also the need of ether was rejected from Michelson Morley experiment and relativity theory was developed rejecting ether on equivalence principles.

PAGE-TWO

Maxwell developed his equations on electromagnetic propagation from wave theories

taking ether as medium. Experiments conducted to confirm the equations as basic tool in electromagnetic propagation.

Relativity theory with isotropic frame and maximum light speed limit in vacuum was a successful outcome resulting in GPS and tested in our solar system again and again.

Space is warping around matter to look as gravity and the time is taking a dimension in space-time convolution to solve our research on astronomical as well as quantum theories quite successfully but the old questions in double slit experiments remained. Vacuum energy was required in many quantum laws with virtual particles when Casimir effect was found experimentally.

It was a clear indication of some real exotic particles mediating force everywhere and Einstein though stumbled with cosmology constant from his equations but ignored till Hubble showed the expansion of the universe. Something is there like ether doing all these acts but whether isotropic throughout universe or what connection it may have with gravity was not explored and it was assumed isotropic cosmology constant value which calculations hijacked into an unbelievable figure.

Something is wrong going on but no body expected that Newton's gravity laws may not be applicable in galactic rotation, requiring the need of dark matter. The doubt on equivalence principle cropped up as well as relativity theory of isotropic universe. Soon we saw the accelerating picture of our universe from supernova observations beyond doubt necessitating a dark energy component and calculations show matter is only five percent and rest is dark matter and dark energy.

New cosmology observations found dark pull and dark flow as if something is pulling from outside our universe.

An attempt was made to revise Newton in MOND theories but the gravity mechanism is not known and Einstein's special gravity theory failed to account for such observations. Gravity wave search is going on as well as dark matter and dark energy from heaven to remote deep mines.

On the other hand in quantum physics, the experiment by Rutherford never concluded definitely the protons and neutrons at center of atoms but strong force was assumed and Bohr tried to explain scattering by orbital jump theory of many electron orbits to a limited cases of light gases.

With all these knowledge, we developed a standard model on probability and uncertainty along with many versions of string theories. Experiments supported standard model though people were doubting the frame work. Are we sure that quantum physics is a calculus game? Are we sure that there are six quarks downloaded from standard model? Are we sure Higgs Boson derivation is correct from standard model? Or the revised atomic model more correctly describe two quarks –top and bottom without the need of strong force on a proton pulp atomic model.

Is it possible that our universe is electric with dark energy non isotropic field density soup of mono magnetic gravitons and anti gravitons swirling and whirling in galactic rotation revising Newton as. $F = P.G.M.m/R.R$ where P is permeability factor of non isotropic dark energy we also call ether.

Why we are not sure about standard model Higgs Bosons found in LHC as if it may not be the reality when mass can also be intrinsic property like charge. Mass can not be

PAGE-THREE

acquired if we say $E = M . C \text{ SQUARED}$. The methods are contradicting. Professor Higgs

with old calculations cannot dictate LHC results and CERN is looking for revised physics beyond standard model .

many others. These developments in astronomy and quantum physics are recent but I published a few articles in ASTRONOMY.NET in year 2002 predicting all these recent observations through his /1/ MISJUDGEMENTS OF NEWTON AND ETHER=GRAVITY=DARK ENERGY THEORY OF UNIVERSAL MONO MAGNETIC SOUP,-----/2/ BALLOON INSIDE BALLOON THEORY OF MATTER AND ANTI MATTER UNIVERSE ON OPPOSITE ENTROPY PATH producing dark energy at common boundary by annihilation and injected into both the universes to cause the drama of all laws, gravity, expansion etc. etc. in non isotropic swirl and whirl soup of mono magnetic coupling rendering universe electric. So ether is mono magnetic non isotropic electrical where light is electromagnetic wave transmission and gravity is mono magnetic coupling of graviton component on matter molecular coupling causing equal fall of all molecules known to Galileo or equal molecules in Avogadro's law when temp and pressure are same for the gases.

Now we have to find out these couplings from 100 TEV. LHC experiments to revise standard model for further research and to establish my ideas. Directional push of gravitons due to a repulsive coupling effect of mono magnetism on molecules is the effect ,we call gravity. Gravitons , a component in dark energy are non isotropically distributed and have a direction of flow to give directional push. Near earth , we see gravitons are flowing like arrows to wards center of earth to create a magnetic molten core and may be a mini black hole. Matter molecules of different mass are pushed to fall and Galileo observed that all molecules fall equally. But why may be a question. Let us say that pushing force of gravitons on a molecule is F . Then F varies with $4 \pi R$ squared. Again acceleration...

ACCELERATION= FORCE/MASS of a molecule and observed constant by Galileo. So we can say that R squared divided by mass M is constant for any molecule. That is why $M/R.R = \text{CONSTANT}$ for any molecule which can be checked from experiment.

This emergent push graviton gravity theory tells us that gravity is not fundamental force as prescribed by standard model So gravitons need not be mass less but the emergent theory predicts it's mass about 750 proton mass. This is a FERMION graviton having mass and qualifies for a candidate as a dark matter in itself.

As such gravitons are dark matter in itself.

Another emergent effect of gravitons is its interaction with color charge quarks inside protons and neutrons through a residual coupling charge. This graviton is a BOSON graviton having no mass . Here BOSON gravitons work as force carrier for a strong nuclear force in quantum gravity in the making of any atomic nucleus. Therefore the assumption of gluon and strong nuclear force is wrong. It gives rise to my atomic theory of pulp proton model ,which can be described separately. When the unbalance residual become bigger in bigger atoms with many protons and neutrons, we see a weak nuclear force causing disintegration for a radio activity effect due to Z-bosons which is another sub atomic entity in the gravitoetheron super fluid. .

We can imagine the galaxies are rotating as a super fluid disk so that the gravitons are

PAGE-FOUR
getting more and more dense from center of galaxy due to centrifuging action. The

periphery will be more concentrated and the galactic rotation curve as observed by Dr. Rubin as horizontal, can now be explained by these distribution of heavy gravitons and no need of assuming any further dark matter. Now the development of universe structure is quite evident as opposite entropy path will bring one universe to tends to zero entropy when BIG BOUNCE will occur and Dr. Guth exponential inflation will start and soon accelerating expansion due to dark energy causing dark matter scaffolding around left over black holes escaped evaporation from previous era to act as seeds for galaxy formation and so on when at a cozy corner, we will have good laws by chance to create life on a planet and ponder about our universe. We have recently seen the great swirls of galaxy formation around escaped evaporation black holes from previous era in BICEP2 as well as in CMB .

There is no reason to reject a negative entropy for a antimatter soup of the universe surrounding our matter universe. This soup of antimatter will evolve as primordial soup with very low entropy for causing the next bounce.

The antimatter universe never evolved as a universe as per my theory due to a negative entropy path and reverse arrow of time. This has profound implications as the antimatter universe in plasma is gradually getting reduced in volume due to formation of black hole on reverse time but never a structure of an universe .

So the antimatter universe engulfing our matter universe is actually turning to black hole from plasma soup of antimatter on opposite entropy path and sooner or later will reach very low entropy when a BIG BOUNCE will occur giving Dr. Guth an exponential inflation . Thus the scenerio is ever re cyclic, re bounce with different laws from epoch to epoch and by chance tuned laws for our existence. Now our universe may be inside a black hole.

The scenario is ever dynamic re bounce, re cyclic forever in a mega universe infinite backdrop of many balloon inside balloon. Time has no beginning or end but entropical gradient flow nonsymmetrical snap shots – never absolute or a dimension causing all presents in the film roll of our existence. We cannot compare time at different parts of the mega universe.

Time given by atomic clocks are due to gravity changes from point to point in space and not as defined in relativity theory. GPS time corrections never certify Einstein for his relativity theory.

Infinite mega universe is possible as it is total void –as such zero but occupied by all balloons inside balloons with the dark energy, dark matter giving scaffolding of structures. Dark matter is concentrated dark energy and when dark energy is getting focused at center of earth or center of galaxy, we get black holes, many times less focus may cause hot molten magnetic core etc. etc. Dr. Hawking also of the same opinion about black holes. Read my theories published in ASTRONOMY.NET and sent to all science forums from year 2002 and now the observations seem to be giving some ideas of NEW PHYSICS of tomorrow. The emergent gravity mechanism tells us that when an object fall , we see that gravity pressure on molecules gradually changes by a factor $1/R.R$ where R is distance from center of earth . That is why EQUIVALENCE PRINCIPLES may not be true and as a result RELATIVITY THEORY based on equivalence principles may not be exactly true but approximately true in low gravity solar system PAGE-FIVE Due to limitations of words, I am giving a quick glimpse in narration but some mathematical models also can be provided if so desired.