

Phenomenon of Kepler's Lawlessness Rather than Two Stars for General Relativity. The Nobel Prize in Physics 1993 does not confirm Einstein theory of gravitation rather it confirms Divine MOND(Modified Newtonian Dynamics)

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Abstract: On 2 July 1974 the first signals were discovered from binary pulsar, two neutron stars that orbit each other , it turned out that they could be used to demonstrate the existence of gravitational radiation. It seems Einstein was right. [1] . Einstein did not talk about particle theory of gravity rather he told that it is property of space time by bending of starlight near massive body and by radar test. These waves are not as predicted by Einstein as it is mind that triggers gravity rather than fast moving object radiates gravitational waves . Einstein did not talk about divine mechanics (mind) of gravity interactions . Gravity waves are nothing but moving energized gravitons in wave pattern with velocity of light as photons (particle nature) move . It is the spring balance that detects density (number of EGs / unit area) of energized gravitons , hence they are not hypothetical particles. Two neutron stars that orbit each other is confirmation of Divine MOND (Divine modified Newtonian Dynamics)rather than gravity waves predicted by Einstein's theory as mathematics alone cannot have thought of mind the ToE.

Key Words Divine MOND , theory of general relativity , Mind and Mass, Energized Gravitons (DM) , energy pool of the universe (DE) .

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I. Introduction

1.1 What is Einstein's theory of General Relativity

Einstein's Relativity – it is Myth and illusion .

Somewhat counter-intuitively, general relativity asserts that gravity is *not* a force. Instead, it is the result of objects travelling the shortest possible distance between any two points in a curved geometry as shown in Fig 1 . This is not the three-dimensional geometry of space, but that of four-dimensional space-time (i.e. one time plus three space dimensions).

There is a beautiful analogy involving a bowling ball and a marble on a trampoline. Imagine placing the bowling ball on the surface of the trampoline. This acts to curve the trampoline in a region around the ball, analogous to the curvature of space-time around a massive object such as the sun. [2]

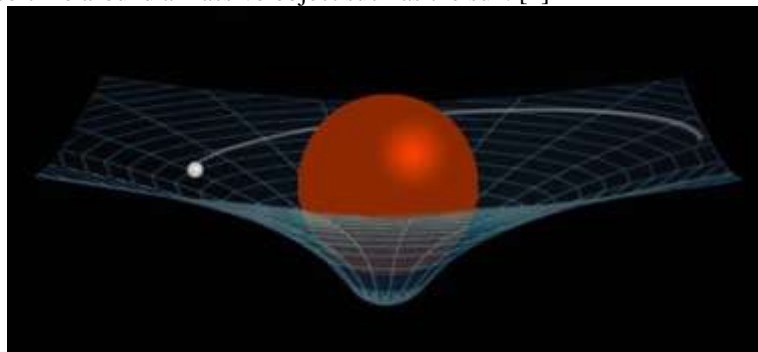


Fig 1 the bowling ball curves the surface of the trampoline, and the marble simply rolls along geodesics of this curved surface

If we ignore friction, we can imagine rolling a marble on the surface of the trampoline such that it orbits the bowling ball. There are no forces acting between the two balls – the bowling ball curves the surface of the trampoline, and the marble simply rolls along geodesics of this curved surface. Analogously, there are no “forces” acting between the sun and Earth – the sun curves space-time, and Earth travels along a geodesic of this curved space-time.

But what are gravitational waves?

As our small marble rolls over the surface of the trampoline, like ducks swimming through water, very small ripples in the fabric of the trampoline are generated and move away from the marble. Analogously, when any mass moves through space, ripples are generated in the fabric of space-time that travel away from the moving object at the speed of light. These ripples are gravitational waves. These waves carry energy from the system, and this fact was used in 1974 to indirectly infer their existence. Russell Hulse and Joseph Taylor measured the orbit of a binary neutron star system with great accuracy, finding that the orbit shrunk by 3mm every eight hours. This observation matched the predicted energy loss due to gravitational waves with such accuracy that, in 1993, Hulse and Taylor were awarded the Nobel Prize in physics. [2]

How do we directly detect these waves?

Hulse and Taylor's detection of gravitational waves was indirect, in the sense that they only inferred their existence by ruling out other options. Since the 1960s, physicists have attempted to build gravitational wave detectors that will *directly* detect their presence. To understand methods for direct detection, we must first understand the effect a gravitational wave has on particles as it passes. Consider a ring of particles placed in a perfect circle. A gravitational wave passing will make these particles deform into an ellipse, oscillate back into a circle and then into another ellipse perpendicular to the first. This pattern will continue as the gravitational wave passes through our ring of test particles as shown in Fig 2.

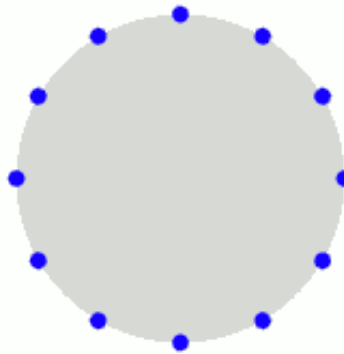


Fig 2 A ring of test particles influenced by a gravitational wave.

This motion of test masses suggests an obvious method for detection – Michelson interferometry. The nuts and bolts of interferometry involve splitting a single laser beam in two, each travelling at right angles to the other. Each beam travels a certain distance, hits a mirror and returns to the original point at which they split, recombining to form a single beam once more. If no gravitational wave is present, each beam will travel the same distance, and the combined beam will have a certain interference pattern caused by the recombination of the light. But when a gravitational wave passes through the system, the relative length of each arm will oscillate back and forth, and the resultant interference pattern will display this motion as shown in Fig 3 Sounds easy ...

It is myth and illusion as earth mass is below a critical value such that EGs have no interaction with photons on earth (shown by straight sun light shafts coming from clouds on sunny days) but it has interaction near massive body with EGs (as density of EGs/unit area is high or mass of stars are above critical value) as bending and radar test causing slow down of speed of photon. But it is mind of M2 that decides when to interact (on massive body) with EGs and when not to interact (on earth).

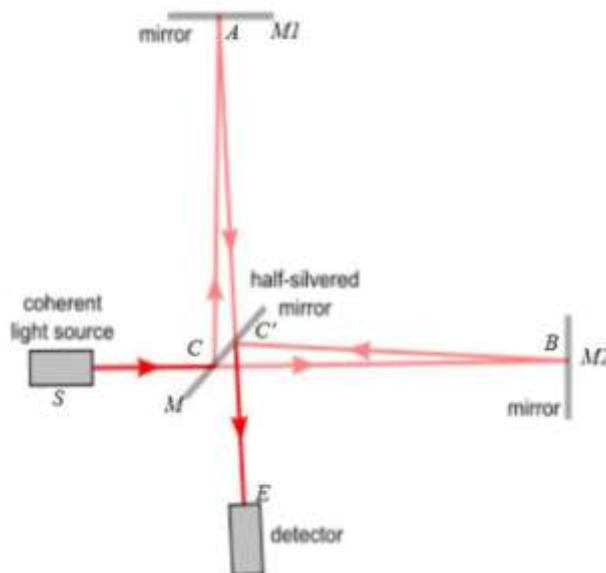


Fig 3 A Michelson interferometer is used to detect gravitational waves. As a wave passes, each of the arms of the interferometer changes length by different amounts. Wikimedia Commons

The entire difficulty in detecting gravitational waves is their size. Our trampoline analogy is again useful. A large bowling ball rolling along the surface of the trampoline will give off significantly larger ripples than our original marble. Likewise, the motion of Earth through space gives off relatively small ripples compared to that of a super massive black hole. Exotic events such as supernovae or the merging of two black holes therefore provide the best candidates for the emission of large gravitational waves. And by a “large” gravitational wave, I mean small! The strongest waves change the position of particles by no more than one part in 1,000,000,000,000,000,000. And this is exactly the difficulty in measuring these waves. To successfully detect some of the largest gravitational waves in the universe, we need to measure a change in distance on the order of one part in 1,000,000,000,000,000,000. This number explains why it has taken almost 100 years to detect gravitational waves!

A worldwide detection effort

A worldwide network of Michelson interferometers has been built to directly detect these tiny gravitational waves. There is the Laser Interferometer Gravitational-wave Observatory (LIGO), as shown in Fig 4 which is a network of three detectors located in the US. There is the Virgo detector located near Pisa, Italy and there is the GEO600 detector near Hannover, Germany .



Fig 4 LIGO gravitational wave detector in Hanford, USA. LIGO

There are further plans to build gravitational wave detectors in Japan, India and even in space, although these latest plans have been temporarily shelved. We even have a mini-gravitational wave detector in our own backyard, with active plans to expand to a full-size version in the medium term. The Australian International Gravitational Observatory (AIGO) is a facility for the development of gravitational wave technology located in Gingin, outside Perth. More than 60 scientists across Australia are active members of the LIGO Scientific Collaboration (a collaboration now totalling more than 800 people) working on topics ranging from laser and

mirror technologies to source modelling and data analysis. (It should also be mentioned that Michelson interferometers are not the only way to directly detect gravitational waves. One of the other most promising methods is through pulsar timing arrays, where the neutron stars are now part of the detector not the source. Australian astrophysicists are leading the world in this field through the Parkes Pulsar Timing Array project.) Of all the interferometric detectors it is the LIGO/Virgo collaboration that is expected to see first light. These detectors have recently shut down to upgrade to their "advanced" phase, which will give another factor of ten in sensitivity. The advanced detectors will come online sometime in 2015, giving the very real possibility that gravitational waves will first be directly observed in general relativity's centenary year. *This is the first of two articles on gravitational waves by Paul Lasky. The second will provide details of the exciting physics, astronomy and cosmology we can learn once gravitational waves have been successfully detected.*[2] as shown in Fig 5



Fig 5 As can be seen from this map, gravitational wave detection is truly a world-wide Endeavour.

1.2 Flaws in General theory of relativity [3]

General theory of relativity is not a logical theory to explain all gravitational phenomena. If physicists believe this theory as right answer about gravity, then they are misunderstanding the gravity and i.e. A key concept of General Relativity is that gravity is no longer described by a gravitational "field" but rather it is supposed to be a distortion of space and time itself. Physicist John Wheeler put it well when he said "Matter tells space how to curve, and space tells matter how to move." This key concept is a wrong concept to talk about any force like gravity There is no theory yet complete to explain gravity phenomenon. Gravity phenomenon would be well understood after understanding the making of new model of the universe i.e. Hoyle -Narlikar universe, about research of Basic Building Blocks and atomic genetics as taught by participatory science. The Difference in the structure and function of Gravity (divine energized graviton- that causes g), Light (photon) and mechanical energy (photon- that causes a) is shown in Figure -6. As light is mediated by photons, similarly gravity is mediated by energized gravitons. As photon is emitted by atoms as energy quanta similarly energized gravitons are emitted by nucleons of the atoms. As luminosity (intensity) of light decreases with distance similarly density of energized gravitons decreases with distance..As regard velocity, both have same velocity i.e. velocity of light.

If you want to test New theory of gravity you have to equip yourself with New knowledge of mass, inertial mass and gravitational mass and inertia. According to new theory, the inertial mass of body is not always exactly equal to its gravitational mass There is difference in gravitational acceleration (g) and acceleration of objects other than gravity (a). Einstein has wrongly made principle of equivalence i.e. There is no way for an observer in a closed laboratory to distinguish between the effects produced by a gravitational field and those produced by an acceleration of the laboratory. The observation that propounds that this principle of equivalence is TRUTH is super unification phenomenon which is not proven yet. It does mean that constituents i.e. basic building blocks of energized gravitons are different than Basic building blocks of photons. This is the basis of two particle hypothesis postulated by me. Same is true for energy matter equivalence. It is also a myth as super unification is not proven yet.

The energized graviton (that causes g) is structurally and functionally different than photon-mechanical energy (that causes a). The functional difference of (g) and (a) is only the direction. (g) is directed only one side i.e. towards center of the mass while (a) could be directed in any direction. The further difference is that the forces that is mediated by photons is a exchange phenomenon and this led to shielding effect. But on the contrary gravity is not a exchange phenomenon and there is no shielding effect with gravity. There is no antigravity force in the universe why? The reason is that the attraction and repulsion are governed by atomic genes and atomic genes are divine i.e. they work as fed by highest center of the universe during pre creation era. So the entire working of energized graviton is governed by atomic genes of energized gravitons. Similarly entire working of photon (mechanical energy) is governed by atomic genes of photon. There is no attraction or repulsion phenomenon with (a) (mechanical energy). The working of energized graviton is

different than working of photon (mechanical energy) . How energized gravitons work that we shall study now in detail. How mechanical energy (photon) works that we shall study in velocity of electron. And how both work together we shall study in CRO where we shall see how electron's gravitational mass increases with increase in velocity bringing it from 60% velocity of c to 80% velocity of c. ---[3].

Please see the structure of energized graviton (that causes g) and photon (that causes a) as shown in Fig 6

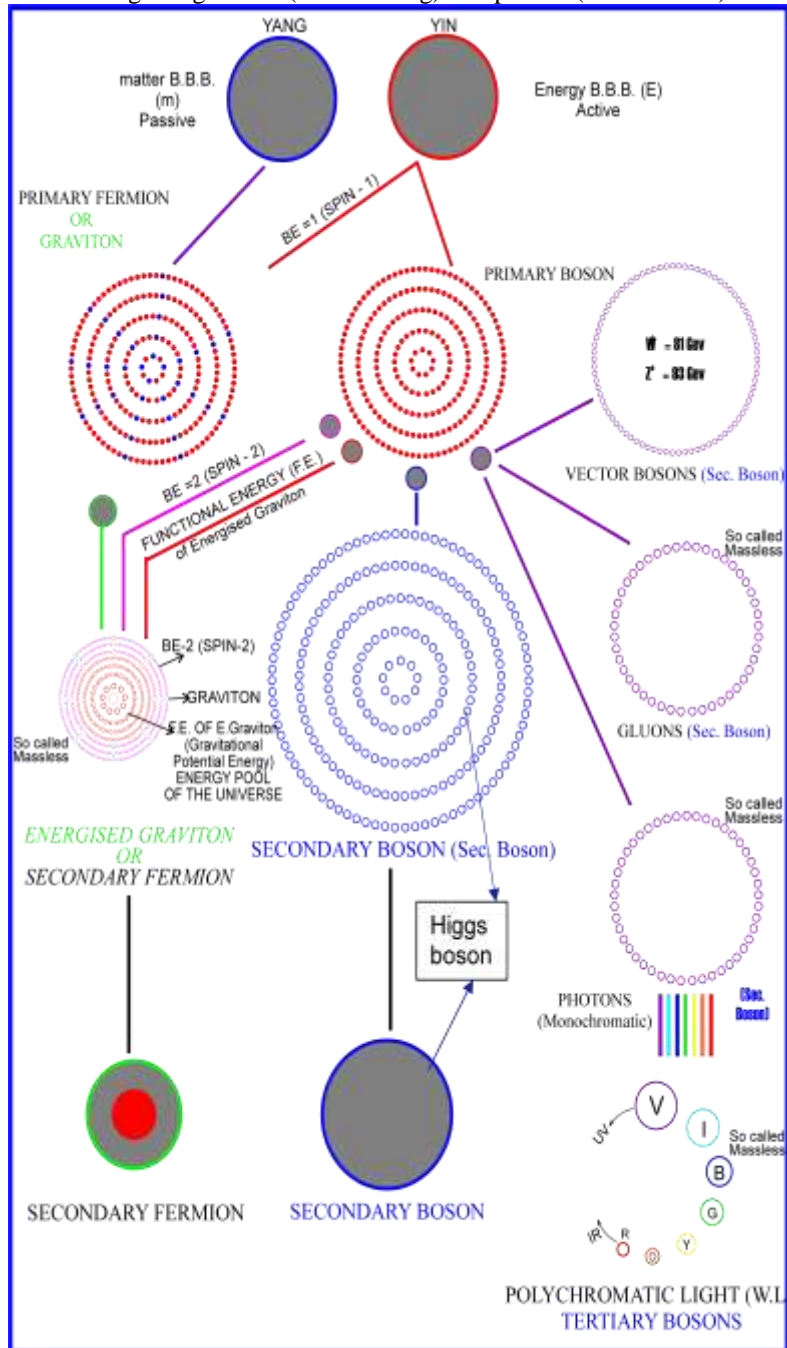


Fig 6 structure of energized graviton that causes g and structure of photon that causes a

So in future you will see that general theory of relativity is not only an illusion rather it is broken pillar of Big Bang theory.

Structure of Graviton (Primary fermions) , Energized Graviton (Secondary Fermions) and Photon.

The particle that take part in gravity interaction is energized graviton that causes acceleration due to gravity (g) which is made up of more fundamental particles called gravitons (primary fermions) and Binding energy -2 (primary bosons) that causes it to spin and functional energy of energized graviton (primary bosons) which is called potential energy of gravity or energy pool of the universe or Dark energy . While mechanical energy particle or photon that causes (a) is made up of more fundamental particles called primary bosons only. Hence

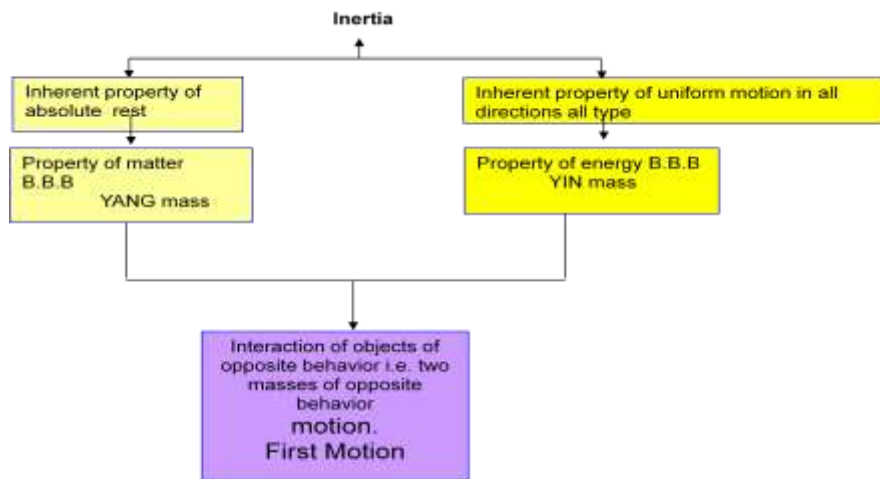
principle of equivalence is wrong as far as structure is concerned both are different particles that causes g and a in the universe.

1.3 Concept of Inertia and Motion at the level of B.B.Bs.

Let us define the word Inertia and Motion. At the level of Basic Building blocks, the word Inertia is defined as-

Inherent property of rest or uniform motion in straight line (classical physics) . Inherent property of rest is the property of matter B.B.B . (yang) and inherent property of motion in all directions is the property of energy B.B.B (Yin). It is the property of mass part of reality of the universe. Hence there are two types of masses in the universe . one is having property of absolute rest i.e. yang or matter B.B.B and other one is having uniform motion in all directions all types i.e. Yin or energy B.B.B.

Motion is defined as the effect of interaction of two power of opposite behavior . one is having property of absolute rest i.e. yang or matter B.B.B and other one is having uniform motion in all directions all types i.e. Yin or energy B.B.B. During interaction inertia of energy B.B.B over powers inertia of matter B.B.B and the resultant is Motion of matter B.B.B. Spin -1 in Figure -2 is the first motion of created universe i.e. spin of primary fermion or graviton. as shown in Fig 7 and Fig 8 .



First motion in the created universe is spin of particles (fermions and bosons) . Type of spin is decided by atomic genes of that particles i.e. half integer spin is decided by thought of half integer and integer spin is decided by thought of integer spin of that particles.

Fig 7 first motion of the created universe- hypothesis

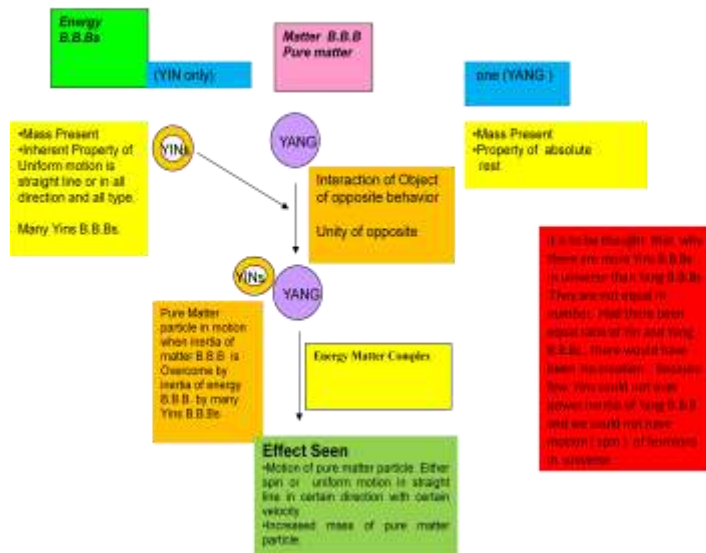


Fig 8 first motion of the created universe- hypothesis)

Eletron Motion in C.R.O.

It states that electron mass increases with velocity. This is according to observatory physics.

Participatory Physics: According to this science concept of motion is as under- When B.B.Bs become fermions and bosons then motion is defined as the effect of interaction of two power of opposite behavior . One is having property of motion i.e. mechanical energy particle or photon and other one is having property of relative rest i.e. fermions or electrons (as they have spin property) and the resultant is motion. as shown in Fig 9 and Fig 9.1

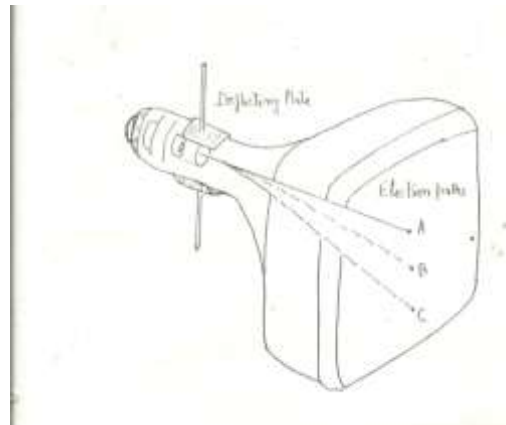


Fig 9 electron motion in CRO

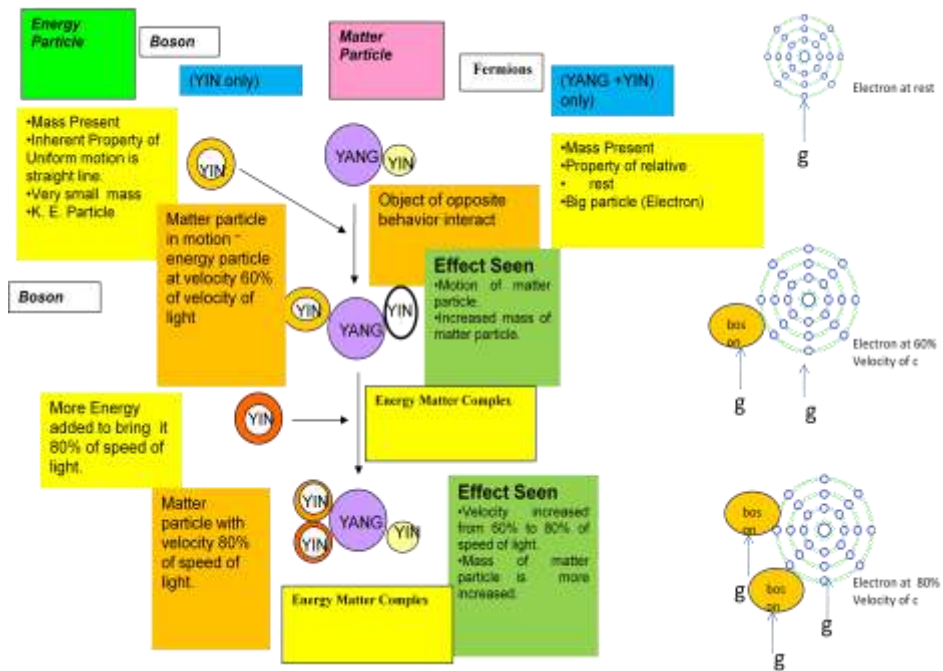


Fig 9.1 electron motion in CRO at different velocities with different Gravitational mass – Hypothesis

Table 1 : Electron Motion in CRO

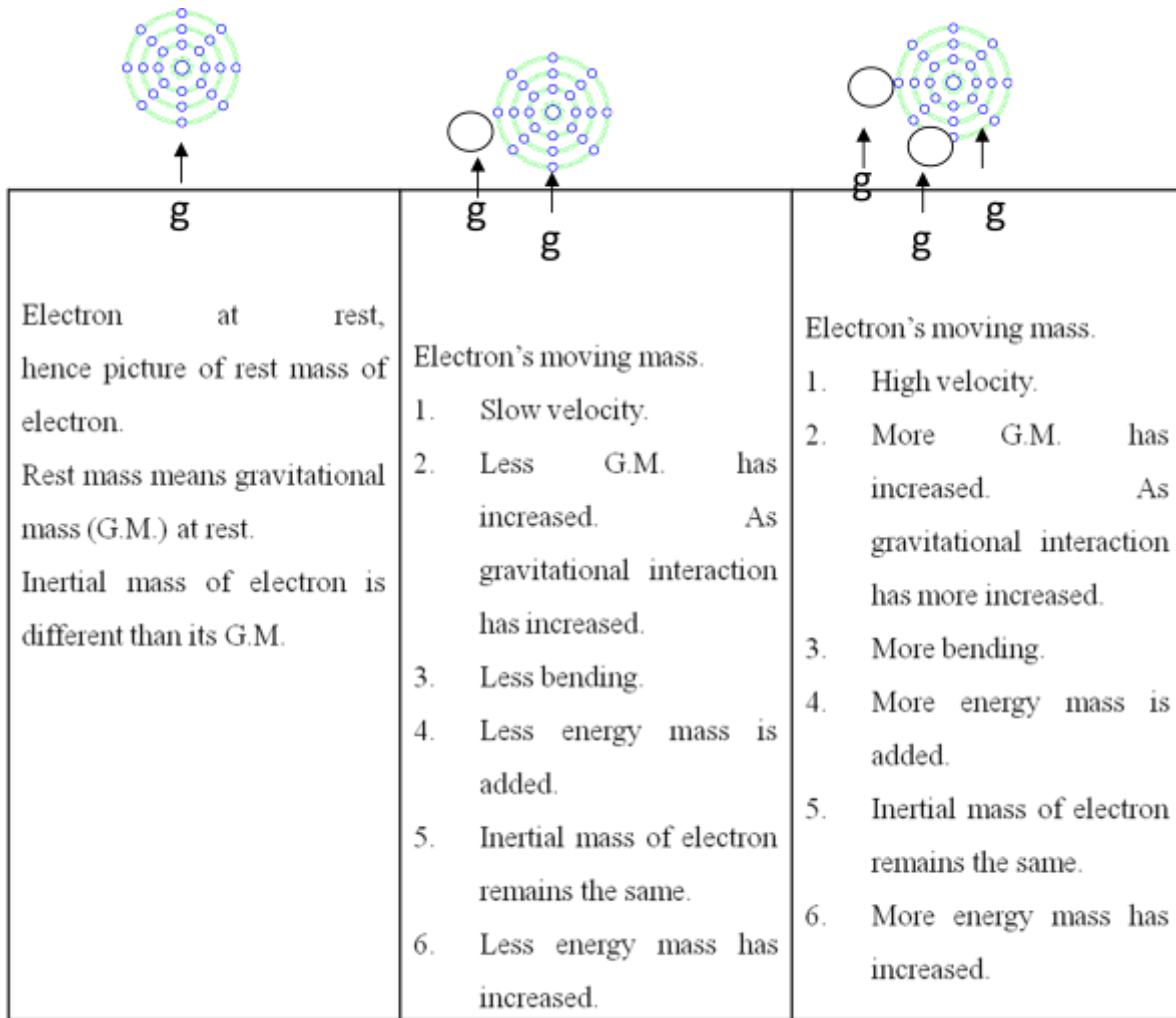


Fig 9.2 Electron Motion in CRO

The input energy will be gradually lost only when *friction* is there(conditioned working) otherwise it will work as force or K.E. or YINs , till it has made complex with YANG & YANG will keep on moving. (Newton's 1st Law). Or complex gets detached by itself when there is no friction (unconditioned working)

Inferences:

Energy has mass.

Electron mass (Matter Mass or fermions mass) does not increase with velocity. It is the energy mass (Boson mass or Kinetic Energy mass) which increases with velocity. If one adds more energy to increase velocity, the electron total mass will increase (electron rest mass plus kinetic energy particle mass). This is what we observe in C.R.O. when we bring electron from 60% of velocity to 80% velocity of light.

CONCLUSION

Participatory science finally says with proof and confirmation following universal truth.

1. Matter particle (Fermions) of same mass but of different velocities carry different masses of energy particle (Boson).
2. Matter mass (Fermions) remains the same. It is the energy mass (Boson) which is being added up to increase the velocity.
3. Electron mass (Fermions mass) remains the same. It is the energy mass (Boson) which increases with the increase of velocity. As fermions and boson are not inter convertible. So the increased mass belongs to energy mass not electron mass. Based on simple logic without adding extra mass one cannot get increased mass.
4. Modern physicists believe that inertia is not an intrinsic property of matter but a measure of its interaction with all the rest of the Universe. This is according to the physicist and philosopher Ernst Mach. Participatory science says that it is an inherent property of matter. For pure matter particle (YANG) inertia is inherent property of absolute rest and for energy particle (YIN) inertia is an inherent property of uniform motion in straight line or in all directions. Thus giving a new concept of motion. Finally participatory science says that matter B.B.B (YANG) and energy B.B.B (YIN) are separate and

absolute, as inherent properties are not inter convertible. *It also condemns inference of the famous equation $E=mc^2$ thus inferring that matter mass and energy mass are not mutually convertible.*

5. In C.R.O., gravity interacts with increased boson mass, which gives us the feeling of increased electron mass or weight. It has been shown in diagram as shown in Fig 9.2.
6. Motion is a vector quantity hence direction of motion is decided by atomic genes. During gravity interaction (g) atomic transcriptions are different i.e. thought of attraction is triggered and during (a) the atomic transcriptions of attraction is absent.

1.4 Inertial mass (I.M.) and Gravitational mass (G.M.) in the light of B.B.Bs

Modern physicists believe that inertial mass of body is equal to its gravitational mass.

But participatory science says that both are different. According to participatory science inertial mass is expressed by quantity of matter (number of yang masses and yin masses i.e. basic building block smallest mass particle) present in the body of particle and gravitational mass is expressed amount of interaction with gravitation. In gravitational mass total amount of matter (number of yang masses and yin masses) changes but in inertial mass total amount of matter remains the same. For example – inertial mass of photon is fixed i.e. total number of yins present in one monochromatic photon. No unit to measure it. But gravitational mass of photon is its own inertial mass plus inertial mass of energized gravitons (when photon interacts with gravity). as shown in Fig 10 and Fig 11

G. M. of photon (figure 6) (Boson) = I. M. of Particle (number of yin) + I. M. of Energized Gravitons (number of yang and yin).

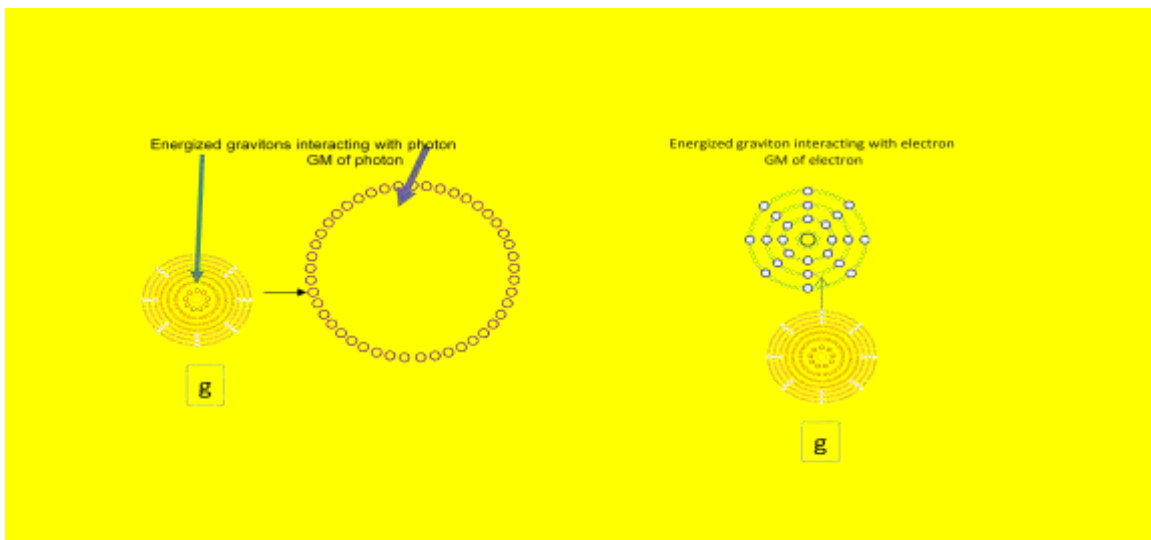


Fig 10 G.M. of photon .

Fig 11 G.M. of electron

G. M. of electron (figure 11) (fermions) = I. M. of Particle (number of yang and number of yin) + I. M. of Energized Gravitons (number of yang and yin).

Finally:

1. G. M. (gravitational mass) of body is more than I. M. (Inertial mass) of that body.
2. G. M. changes with place to place because amount of interaction with energized gravitons is different i.e. on earth and on moon. While I. M. remains the same because it is absolute.
3. G. M. is measured in Kg. Unit system and there is no unit system which can express real mass of body (I. M.)
4. G. M. depends upon interaction. If interaction with energized gravitons is increased G. M. increases and if interaction decreases G. M. decreases. But inertial mass is always constant. One can only increase or decrease I. M. by adding or removing the inertial mass.
5. Realization of I. M. is same but realization of G.M. is different, at certain point where interaction is insignificant, realization of G. M. is zero (weightlessness).
6. Gravitational interaction is more on earth and less on moon. This is shown by spring balance. Therefore G. M. is more on earth than moon but inertial mass remains the same both on moon and on earth.
7. Weight – it is the significant interaction and in this interaction I. M. of body plus energized gravitons mass are involved and the resultant realization is weight.

Weight of body : α I.M. of body

$$\alpha = \frac{\text{Number of gravitons per unit area}}{1/\text{Distance}^2}$$

As we ascend upwards weight decreases and at one point object becomes weightless, it means interaction is insignificant and number of energized gravitons per unit area is below critical value for that particular object.

1.5 Modified Theory of Gravity

Gravity acts in similar way as person rotating a ball with string. Here person rotating the ball is continuously giving the energy (YINs) to the system. This energy (YINs) is divided and presented as 1.Centrifugal force ,2.Centripetal force , 3.Orbital velocity The canalization of energy (YINs or energy B.B.B.) into the system is due to conditioned stimulation of CCP (of matter (YANG B.B.B) present in the ball or in the other words property of matter) which canalizes the energy. If one increases the input energy ,the all effects are enhanced . There is minimum amount of energy (YINs) which is required to maintain the structure and function of the system. Similarly energized gravitons are continuously being released by the centre mass and they keep on interacting with revolving planet. They give energy (yins) to the revolving planet and the energy (F.E.) is canalized by stimulation of CCP of matter (yang) content of the planet into three effects. 1.Centrifugal force ,2.Centripetal force ,3.Orbital velocity .The orbital velocity of the planet indirectly shows the amount of interaction between energized gravitons and planet. If the interaction is more the velocity is increased and when interaction is less the velocity is slowed down. In the other words, if interaction with energized gravitons is increased all three effects are increased and if it is decreased the all the effects are decreased. The effect is clearly visualized in Kepler's 2nd law, where velocity of planet changes with interaction with energized gravitons. When planet is at perihelion it has high velocity than it at aphelion. Minimum concentration of energized gravitons are needed to maintain the structure and function of the system this depends upon the size of the centre mass. The amount of interaction also depends upon the distance from centre mass. The same prerequisites are required in atom to maintain atomic structure and function. Thus stability of atom is maintained. The role of gravity field of mercury (energized gravitons of mercury planet) for maintaining the planet in the orbit is not essential and the effect of energized gravitons on the sun motion is insignificant but for holding satellite in the orbit, the role of mercury gravity is essential. There is fixed amount of concentration of energized gravitons which are liberated by central mass (sun) which make all planets to move. Thus fixed distance also decides their amount of interaction, thus orbital velocity is maintained or to have fixed orbital velocity , fixed concentration of energized gravitons are required in interaction.

Table 2 :Gravitons releasing units and interacting units

Gravitons Releasing Body	Interacting Body
Creator layer (cold dark matter) made up of Hyperons.	Bright Galaxies receding (Hubble law)
Mass centre of galaxy	Stars (Suns) of galaxy or binary galaxies end stages
Sun	Planets or binary stars end stages , comet ,asteroids
Planet	Satellites
Nucleus	Electrons

In some cases the size of the energized gravitons releasing body is very huge than the interacting body. No mathematics can calculate their masses (Inertial Mass) , their amount of interactions and their distances only conscious can realize and can explain the nature. Sun is working as person to rotate earth around it by the strings made up of energized gravitons. Concentration of gravitons per unit area decreases as distance increases therefore interaction also decreases thus orbital velocity of planets get decreased. Gravity is one way interaction not both way (Sun attracts earth not earth attracts sun because earth's gravitons concentrations is below critical value to have significant influence on sun being placed at great distance thus critical value of distance has come into action and made earth not to interact with sun). if we keep planet mass and density constant then the interaction depends upon concentration of energized gravitons per unit area. In solar system the interaction with sun's energized gravitons decreases as distance increases. The interaction depends upon concentration of energized gravitons per unit area. If concentration decreases the interaction also decreases. Mercury planet has maximum interaction with energized gravitons and it takes more energy than Jupiter and Plato, which are very far from sun. It is one way interaction only sun's energized gravitons interact with planet, planet's energized gravitons do not interact with sun.

Axiom : Gravitational effect is interactions of bigger mass by energized gravitons on smaller mass rather than mutual attraction. The gravity is the property of matter (yang) so it presents it self in fermions (yang + yin) only not in boson (yin). Gravitational effect depends upon minimum amount of concentration of energized gravitons per unit area (critical value of mass and distance).

Gravitational Force α amount of concentration of energized gravitons per unit area
(critical value of mass M1)

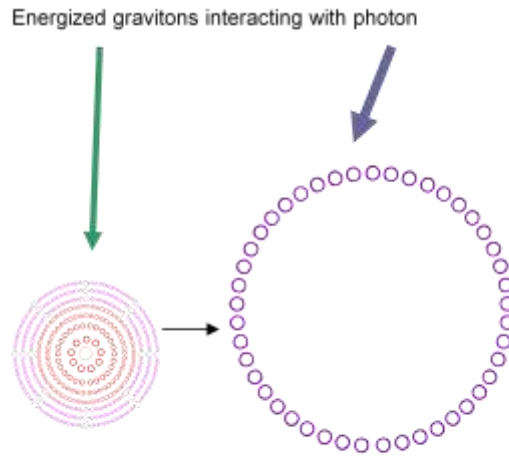
Gravitational Force α 1/ critical value of distance

Neither it is a mutual attraction of two bodies nor it works up to infinity

Rather than $F \propto M1 \times M2 / d^2$ Newton's law of gravitation. it is a mutual attraction of two bodies and it works up to infinity

M2 could be photon, electron, quark, proton, neutron, nucleus of the atom, apple, matter of different densities, planets, satellites, suns, and receding galaxies of the universe.

When M2 is photon, energized gravitons interact with its outer surfaces called interacting surfaces which are made up of Yins (primary bosons). Their number (number of interacting surfaces) varies with the amount of concentration of interacting energized gravitons as well as with the critical value of distance. If photon falls in high concentration area of energized gravitons, the number of interacting surfaces get increased or vice versa and it is inversely proportion to square of critical value of distance. as shown in Fig 12



Effect -- Bending and slowing of velocity - radar test

Fig 12 interaction of energized graviton with photon

For rest M2 (electron, quarks, protons, neutrons and nucleus of atom or apple, matter of different densities, planets, satellites, suns, and receding galaxies) energized gravitons interact with interacting surface of electron and quark which is its outer surface yins (secondary boson or B.E. - 3 or spin-3) as shown in Fig 13, or interacting surface of protons and neutron which is its outer surface yins (B.E.-4 or spin-4) as shown in Fig 14 or interacting surface of nucleus which is its outer surface yins (B.E.-5 or spin-5) as shown in Fig 14. For interacting surfaces of apple or any bigger unit (matter of different densities, planet, satellite, suns, or receding galaxies) the site of interaction is nucleus of that unit. as shown in Fig 14

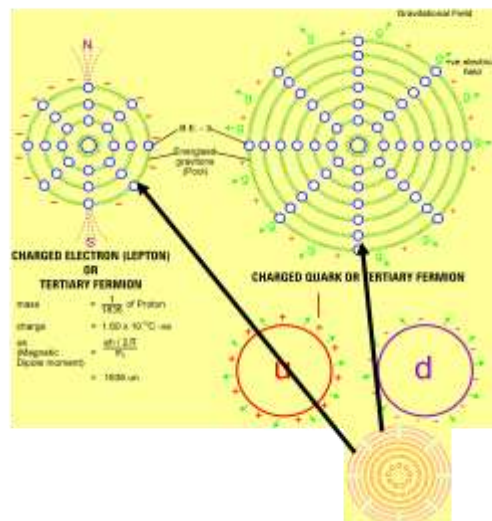


Fig 13 Energized gravitons interacting with Quarks or electron (with its outer B.E.-3)

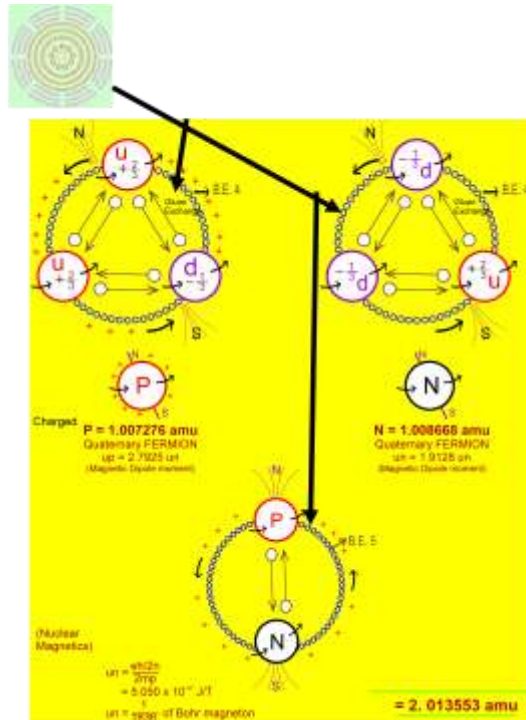


Fig 14 Energized gravitons interacting with protons and neutrons (with its B.E. -4) and with nucleus (with its B.E. -5)

Gravitational force \propto number of interacting surfaces of the M2. (Or if inertial mass of M2 is more, number of interacting surfaces would be more And vice versa.)

Finally

amount of concentration of energized gravitons per unit area
(critical value of mass M1) \times
number of interacting surfaces of the M2 (or Inertial mass of M2)

$$F \propto \frac{\text{-----}}{\text{critical value of distance } ^2}$$

During interaction , there is first locking of energized graviton with the outer interacting surface of the interacting body .The thought of attraction is trigged by YANG B.B.B. (higher center) of energized graviton. The message of attraction (codePCP) is carried by Primary Bosons (energy pool of universe) . Having received the message , interacting body (M2) starts moving towards center of the mass (M1). The energy used in work done is from energy pool of universe (in form of primary bosons for photon and secondary bosons for rest M2 (electron, quarks , protons neutrons and nucleus of atom or apple, matter of different densities , planets, satellites , suns , and receding galaxies) . Or they set in orbit by thought of orbital movement laws. What ever effect is coming during gravity interaction , it is triggered by that thought of interactions . Hence during gravity interaction ,different thoughts are being used to give different gravity effect. These thoughts are triggered by self stimulation of YANG of energized graviton and YANG of M2 if it is fermion or YIN of M2 if it is bosons . This is unconditioned thought expression of B.B.B. It is also called QUANTUM GRAVITY . As thoughts are changing with the result effects are changing.

1.6 Universal Law of Gravitation Definition of word Gravity force----Force of gravitation is neither a mutual attraction of two bodies nor it works up to infinity. It is proportional to amount of concentration of energized gravitons per unit area (critical value of mass M1) as well as number of interacting surfaces of the M2 (or density of M2) and inversely proportional to square of critical value of distance in a fixed frame of reference. . If two massive bodies (both are above critical masses) interact with each other in gravitation , their interacting effects may not be same. For example earth interacts with moon is seen by moon orbiting earth. But moon interacts with earth is shown by low and high tides. Hence when earth is M1 , then moon is M2 , the effect of gravitation is different and when moon is M1 the earth is M2 ,the effect is different. Which effect would come during interaction of M1 and M2 is all decided by atomic genes. This is also called quantum gravity . Quanta means packet (particle) and Quantum mechanics means triggered by different thoughts i.e.

changing of thoughts. Quantum gravity means the interacting particle is divine (changing thoughts) energized (gives energy into system) gravitons (particles) .

Gravity Energized Gravitons are the tiniest batteries of the universe. The functional energy of energized gravitons is slowly being utilized at all level during interaction and thus structure and function of all system (Atom, Solar system, Galaxy and visible universe) are maintained by it . The electrical charge or magnetic property of atoms and particles , sun, planet etc are maintained by energized gravitons. Keeping hydrogen creation diagrams (line diagram of volume -3) in mind following lacunae have been observed as far as concept of gravity is concerned. Why is gravity attractive not repulsive , will be dealt in volume 6 when we will discuss about deepest truth of nature i.e. atomic genetics and programming of universe.


1. Modern physicists consider graviton as a hypothetical particle . But participatory science has proved its existence by explaining the effects. Our instruments (except spring balance) are unable to see these particles but our consciousness sees it (biggest and finest measuring instrument of the universe).

1. Energized Gravitons and fall of object.
2. Energized Gravitons and planetary motion.
3. Energized Gravitons and bending of star light.
4. Energized Gravitons and red shift.
5. Energized Gravitons and atomic structure and spectra.
6. Energized Gravitons and atomic clock.
7. Energized Gravitons and weight of object.
8. Energized Gravitons and structure of visible universe.
9. Energized Gravitons and galaxy structure.
10. Energized Gravitons and perihelion of mercury.
11. Energized Gravitons and dying stars.
12. Energized Gravitons and inter orbital shift.
13. Energized Gravitons and merging of galaxies.
14. Energized Gravitons and Binary stars system.
15. Energized Gravitons and Nuclear fusion on stars (would be discussed separately)
16. Energized Gravitons and Life sciences
- 17 . Energized Gravitons and pulsar (would be discussed separately)
18. Energized gravitons and earth quack . (would be discussed separately)
19. Energized gravitons and spin and magnetic property of Earth and particles, nucleus . (would be discussed separately)
20. Energized gravitons and ignition of earth inside . (would be discussed separately)

2. Modern physicists consider energized graviton as a boson (YIN) Participatory science has proved it a fermions (YANG + YIN). Most of the energized graviton's effect visualizes YIN component of gravity. But YANG part of gravity is clearly visualized in bending of star light by energized gravitons where its YANG component (primary fermion or graviton) interacts with YIN (primary boson) part of photon making YANG – YIN complex (concept of unity of opposite) and there after YANG bends photon with the help of YIN (functional energy of energized graviton or primary bosons) of gravity. Energized graviton losses its energy during interaction but photon's energy remains the same (opposite of explanation of Einstein gravitational red shift) and becomes low energized graviton. Secondly, it is visualized because of super unification is still not proven.

3. Modern physicists believe that gravity is the weakest force in the universe. Participatory science will explain that the roles of energized gravitons are very important in maintaining all structure and function of universe. There is continuous expenditure of energy (primary bosons interact in some interactions while it also transform in to mechanical energy photons in other interactions) for these works. This energy (YIN or primary bosons) is supplied by energized gravitons.

During creation of energized gravitons (see creation physics) a part from its binding energy (B.E.-2), which maintains its integrity, a lot of extra energy was pumped in form of functional energy or primary bosons or dark energy and at each interaction they loose a part of extra energy (functional energy) and become low energy energized gravitons. as shown in Fig 15 , Fig 15.1 and Fig 16 .



	Time taken to orbit the sun in earth years	Average orbital velocity in miles/sec	Average distance from sun in astronomical units*	Average surface temperature in °C	Density relative to water	Equatorial diameter relative to earth diameter	Mass relative to earth	Escape velocity in miles/second (km/sec)	Number of known moons	Number of known rings	Date of discovery
Mercury	0.24	29.8 (47.9)	0.39	+300° (day) -170° (night)	5.4	0.38	0.06	2.64 (4.25)	0	0	
Venus	0.62	31.7 (35.0)	0.72	+475°	5.3	0.95	0.62	6.43 (10.36)	0	0	
Earth	1.00	35.5 (29.8)	1.00	+22°	5.5	1.00	1.00	6.95 (11.18)	1	0	
Mars	1.88	35.0 (24.1)	1.52	-23°	3.9	0.53	0.11	3.12 (5.02)	2	0	
Jupiter	11.86	81 (13.1)	5.20	-123° (at cloud tops)	1.3	11.2	318	37.06 (93.64)	16	1	
Saturn	29.46	6.0 (3.6)	9.54	-180° (at cloud tops)	0.7	9.4	95	22.0 (35.4)	17	Extensive system	
Uranus	84.0	4.3 (6.8)	19.2	-218° (at cloud tops)	1.7	4.1	15	13.3 (21.4)	15	10	1781
Neptune	164.8	3.4 (5.4)	30.1	-228° (at cloud tops)	1.8	3.9	17	14.6 (23.82)	2	1	1846
Pluto	248	2.9 (4.7)	39.5	-230°?	1.1	0.25	0.002	0.6 (1.0)	1	0	1930

*One astronomical unit is 92,956,000 miles (149,598,000km). †Earth's diameter is 7,926 miles (12,756km).

These planets are all visible to the naked eye.

Fig 15 orbital velocity of planets

Line Diagram of Gravity Interaction

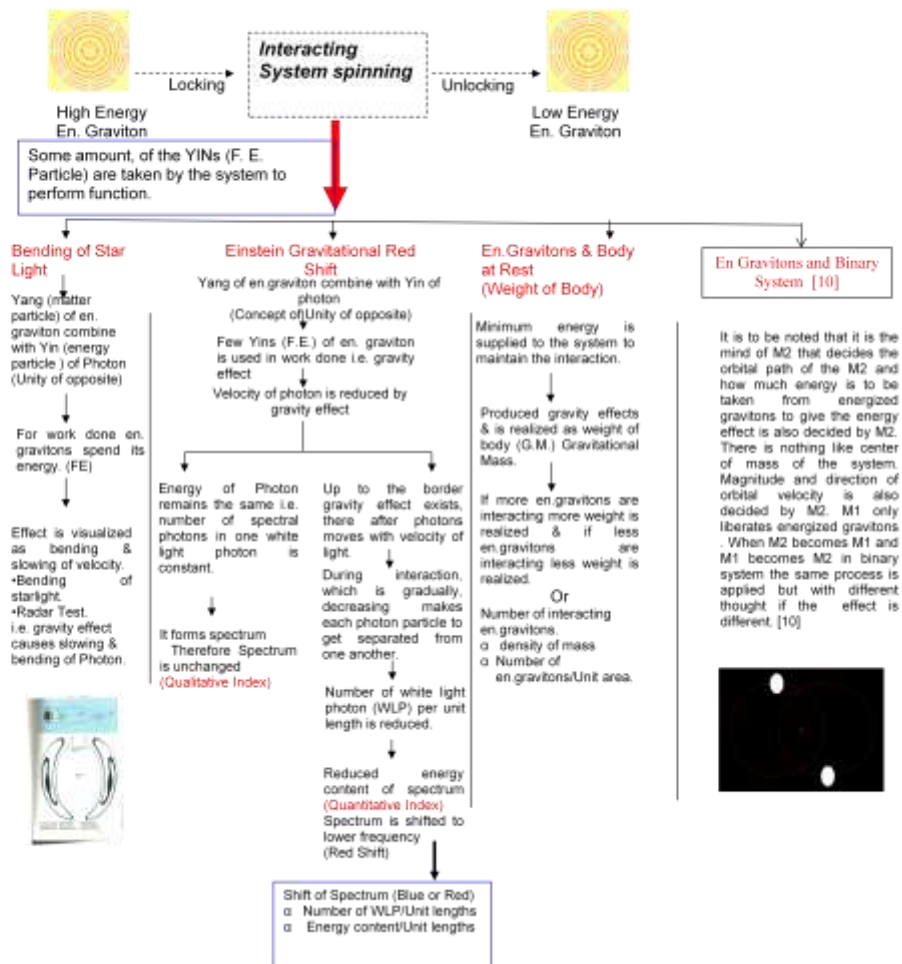


Fig 15.1 line diagram of gravity interaction

Line Diagram of Gravity Interaction

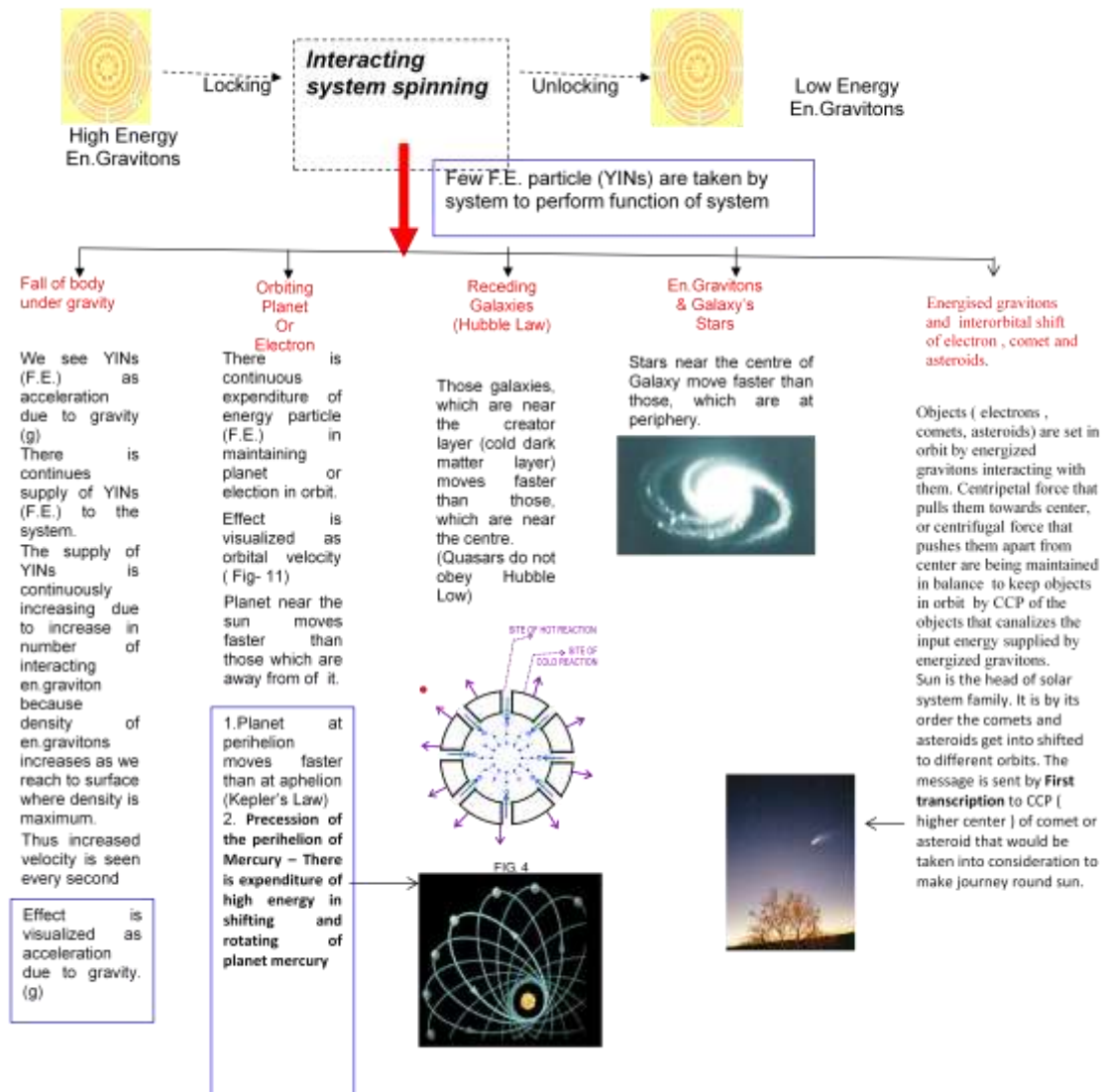


Fig 16 line diagram of gravity interaction

1.7 Gravity According to Participatory Science

1. Earth is liberating energized gravitons and these energized gravitons are more dense near the surface and density reduces as distance from the surface increases. as shown in Fig 17

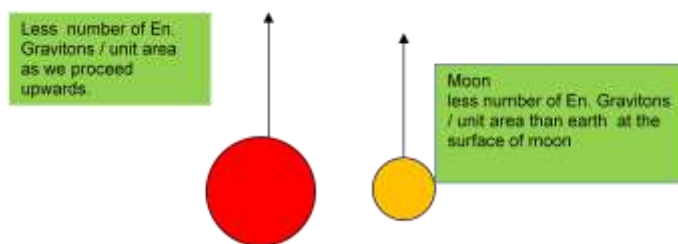


Figure 17 Earth -More number of En. Garvitons / unit area near surface of earth

2. Density of energized gravitons at the surface is proportional to the mass of the planet.

In this equation it is the number of interacting energized gravitons / unit area are more concerned rather than the mass of body. So, for correct result , one must take number of interact energized gravitons/unit area into

consideration rather than mass of planet. Since we cannot calculate number of interacting energized gravitons per unit area therefore we take indirect measure i.e. mass of the planet thus wrong results are recorded. For example: - In case of pin and 10 kg. Weight .. The density of magnetons per unit area liberated by magnet is more than the density of interacting energized gravitons per unit area by earth , therefore pin is pulled up. In case of 10 kg. weight density of magnetons liberated by magnet is less than density of interacting Energized gravitons, therefore 10 kg. Weight remains there. There is difference in density of energized gravitons at the surface of earth and density of interacting energized gravitons in the object .

3. Density of energized gravitons at the surface is proportional to mass of planet. Density of interacting energized gravitons is proportional to inertial mass of interacting object. It is decided by MIND of the object (M2) that how much energized gravitons would interact with the outer interacting surfaces of interacting body (M2) to give the desired effect . It is all fed thoughts and feeding was done in pre creation era by the Highest center of the universe .

4. Modern physicists believe that since value of mass changes with velocity hence value of G is not constant . According to participatory science force of attraction of any mass depends upon the energized gravitons concentration released by body. When this body moves or changes its velocity, the energy mass (boson) is added in the system hence the increased mass is energy mass (concept of motion discussed). Therefore its energized gravitons (secondary fermions) concentration and its release is unaffected. Whatever be the velocity of object, force exerted by the unit masses placed at unit distance will remain same. Therefore value of G is constant. (Bosons and fermions are not inter convertible).

5. Interaction of energized gravitons with different units (photon , electron, quark, proton, neutron , nucleus of the atom, apple, matter of different densities , planets, satellites , suns , and receding galaxies of the universe.) depends upon the fed programming (Fed thoughts) done during pre creation era by highest center of the universe.

1. 8 Gravity and Fall of Bodies (Energized Gravitons & Fall of Object)



Fig 18 two bodies placed at surface and other at height h **Fig 19** falling of two bodies of different mass under g

1, Two bodies A and B placed at different height have same energy content except interaction of energized gravitons in A are more and in B are less. (Fig –18) After a certain distance (critical value) interaction is below critical value therefore no effect is visualized or realized and body becomes weight less (zero gravity effect). Any object at rest on the ground or at height h has same potential energy i.e. zero as shown in Fig 18 .

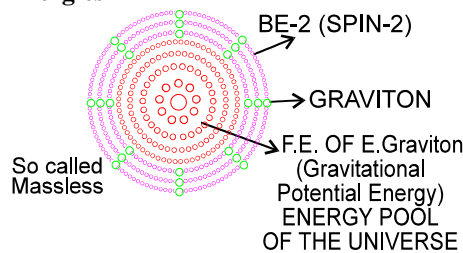
2. Leaning tower of Pisa as shown in Fig 19 . Gravity and falling of bodies of different masses: Since interaction is proportional to energized gravitons present in unit area and also it is proportional to inertial mass (Number of interacting surfaces) of falling body, therefore to achieve same acceleration B takes more energy from energized gravitons than A (inertial mass of B is more than A). Or more energized gravitons are interacting in B than in A. Thus both has same acceleration (g) and thus they touch the ground simultaneously. We see mass of earth is constant for both and both are exposed to same concentration of energized gravitons per unit area but interactions with energized gravitons are different in both.

Finally:- Both touches ground simultaneously. Interaction of energized gravitons is more in B because it has more inertial mass than A. Release of YINs (energy quanta) from energized gravitons is more in B than in A to achieve same acceleration (concept of motion as discussed). At the surface of the earth energy content of B is more than A.

3. Solid and liquid do fall under gravity (g) but gas does not why? The reason is thought of fall is not triggered in gases hence gas (M2) does not give fall effect but once gas state transform into liquid or solid , thought of fall triggers and we see rain fall or snow fall . But gases have weight . Hence weight effect is different that fall

effect and both are triggered by different thoughts (conditioned stimulation). Whatever effect is seen in gravity interaction is all due to thought expression of M2.

1.9 Energized Graviton and Its Energies



ENERGISED GRAVITON OR SECONDARY FERMION

Fig 20 energies of energized gravitons

There are two types of energy involvement in energized graviton as shown in Fig 20.

1. Binding Energy (B.E-2 or spin-2.)---It is involved since creation of particle and it maintains integrity or basic structure of particle. Proton life span is 10^{31} years. It prevents proton to decay immediately into smaller masses but decay is continuous process. Nucleons decay into energized gravitons forming gravity field. Thus decay will continue as long as 10^{31} years when proton inertial mass will become half of its original inertial mass. Proton's life span represents life span of quarks as they are made up of quarks and quark's life span depends upon number of energized gravitons released from quarks. Till 10^{31} years the proton will have its properties activated and it will behave as proton. Nucleons (protons, neutrons lose their inertial mass when they become neutron stars) are gradually losing their inertial masses but properties (spin and gravitational mass) remains the same and these are activated till their life span is over.

Functional Energy (F.E.) It is also called ATOMIC ENERGY. This energy was pumped during creation into gravitons and making them energized gravitons as shown in Fig- 20 and it is used continuously for maintaining the functions of different systems of the universe starting from electrons in orbit of atomic structure, planets in orbits of solar system, all stars in their orbit of galaxies and Hubble law of the receding galaxies of universe by energized gravitons of cold dark matter layer of universe. Charge property of quarks and charge and magnetic property of electron are maintained by Functional energy of energized gravitons or due to their decay. Thus indirectly charge and magnetic property of proton and electron or nucleus are maintained by their energized gravitons which form them. Energy liberated in nuclear fission and fusion also comes from this pool. Generation of electrical energy of Damp (turbines) comes from same energy pool. Primary Bosons (F.E. of energized gravitons) of energized gravitons do interact with photons (secondary bosons), polychromatic light (tertiary bosons) electrons and quarks (tertiary fermions), protons and neutrons (quaternary fermions), nucleus of atom (gases only) to give gravity effects while Primary bosons of F.E. transform into Photons (secondary bosons or kinetic energy or mechanical energy) to interact with nucleus of the atoms (liquid and solids) to give effects of gravity like falling of bodies under gravity or acceleration due to gravity (g) and having planets and satellites in the orbits and other gravity effects

1.10 Mechanics of Ascending curve and Flat rotational curve of galaxies (Divine MOND- Modified Newtonian Dynamics)

It is the mind that designs the curve. The curve has two parts. One is ascending curve (inner) and the second is flat curve (outer). Both show different interactions and both are designed by different thoughts. In gravity interactions, it is the M2 that decides

1. How many EGs (M1) would interact with M2.
2. How much energy would be taken for work done.
3. What effect (magnitude) plus the type of effect would be triggered is also decided by M2.

EGs (M1) only move with velocity of light and they give energy to the system and become low energized gravitons (EGs) The directional effects are decided by M1. [13]. The density (Number of EGs/unit area) of EGs of galaxies first increases (first part of curve) and then decreases (second part of curve) as the distance increases. But in first part (inner) the interactions are different with stars (M2) and center mass (M1) than in outer part of stars (M2) of galaxy and center mass (M1).

In first part the more EGs are interacting with stars (M2) with increase in distance and more energy is taken by stars (M2). Hence increasing rotational velocity is shown by ascending curve. It is not like moving wheel where $V \propto R$ as shown in Fig 21.

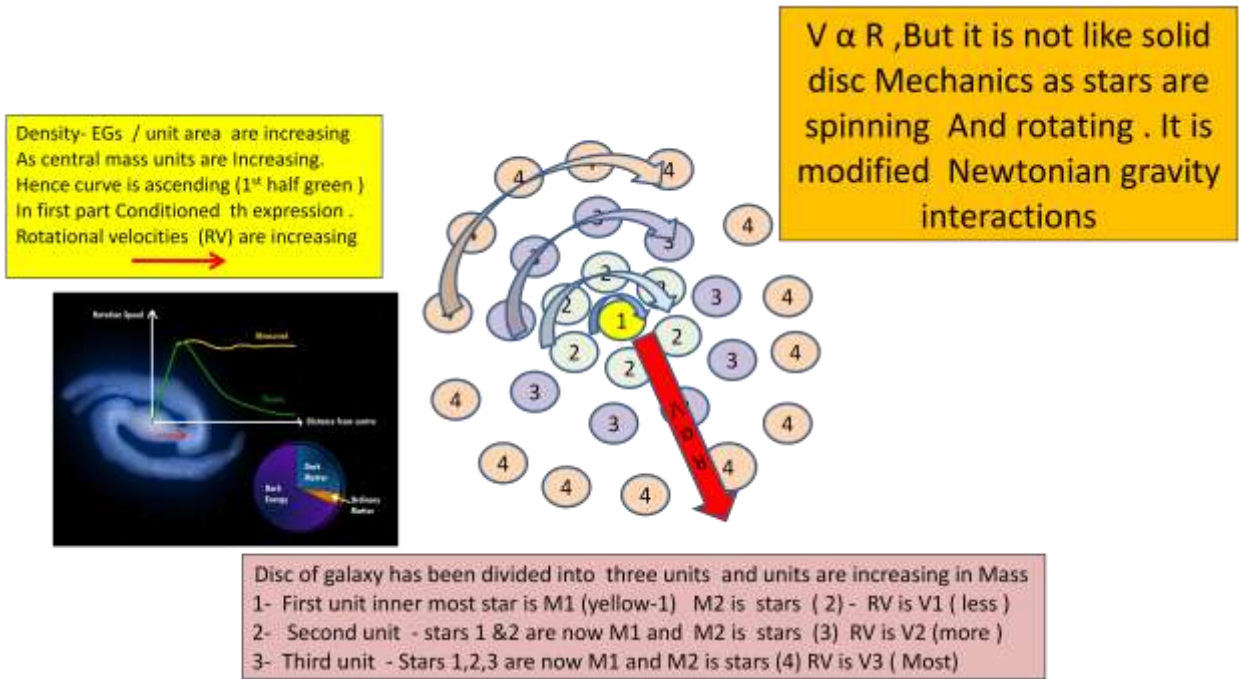


Fig 21 $V \propto R$, But it is not like solid disc Mechanics as stars are spinning And rotating. It is modified Newtonian gravity interactions or *Modified Newtonian Dynamics* which are triggered by mind

In second part (outer) of curve, despite of decreasing number of EGs / unit area (shown by green curve) but number of interacting EGs with M2 are fixed or constant with distance, energy for work done taken by M2 is also fixed or constant. Hence rotational velocity of stars or M2 are same with distance. Thus the curve is flat in outer part. It is unconditioned working of thought expressions in outer curve and it is triggered by time mindness as shown in Fig 21.1 and Fig 21.2. This curve (outer curve yellow – flat curve) is nothing to do with Dark Matter in galaxy. [14]. Galaxies are divine units and arms shape may not get distorted rapidly with time, law of lawlessness comes into play to prevent distortion of spiral arms rapidly despite of decrease in EGs/unit area with distance (decline green curve).

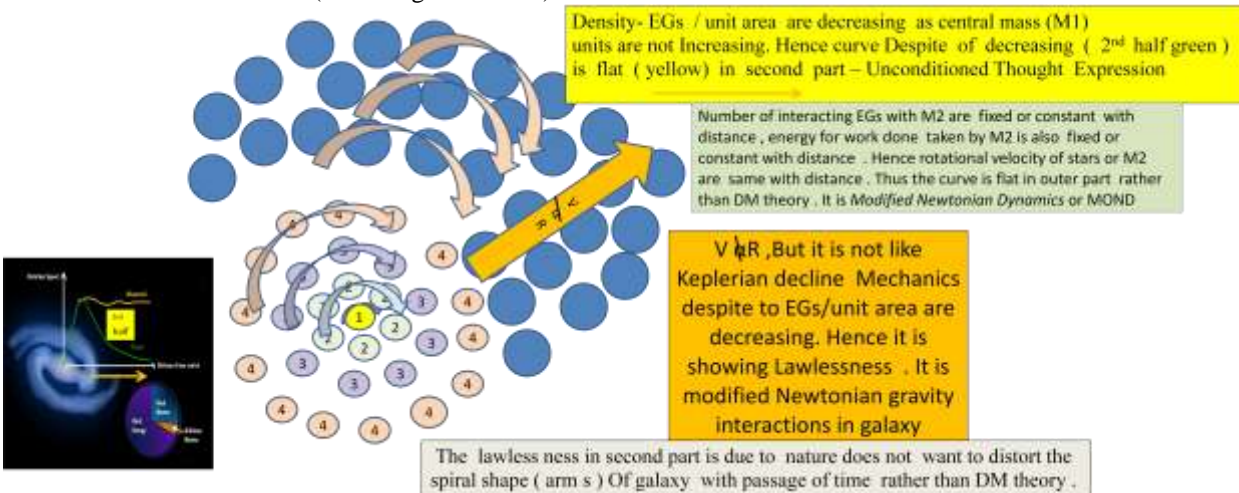


Fig 21 .1 The lawless ness in second part is due to nature does not want to distort the spiral shape (arms) Of galaxy rapidly with passage of time, hence number of interacting EGs with M2 are fixed or constant with distance, energy for work done taken by M2 is also fixed or constant. Hence rotational velocity of stars or M2 are same with distance. Thus the curve is flat in outer part. rather than DM theory. It is Divine *Modified Newtonian Dynamics* or Divine MOND

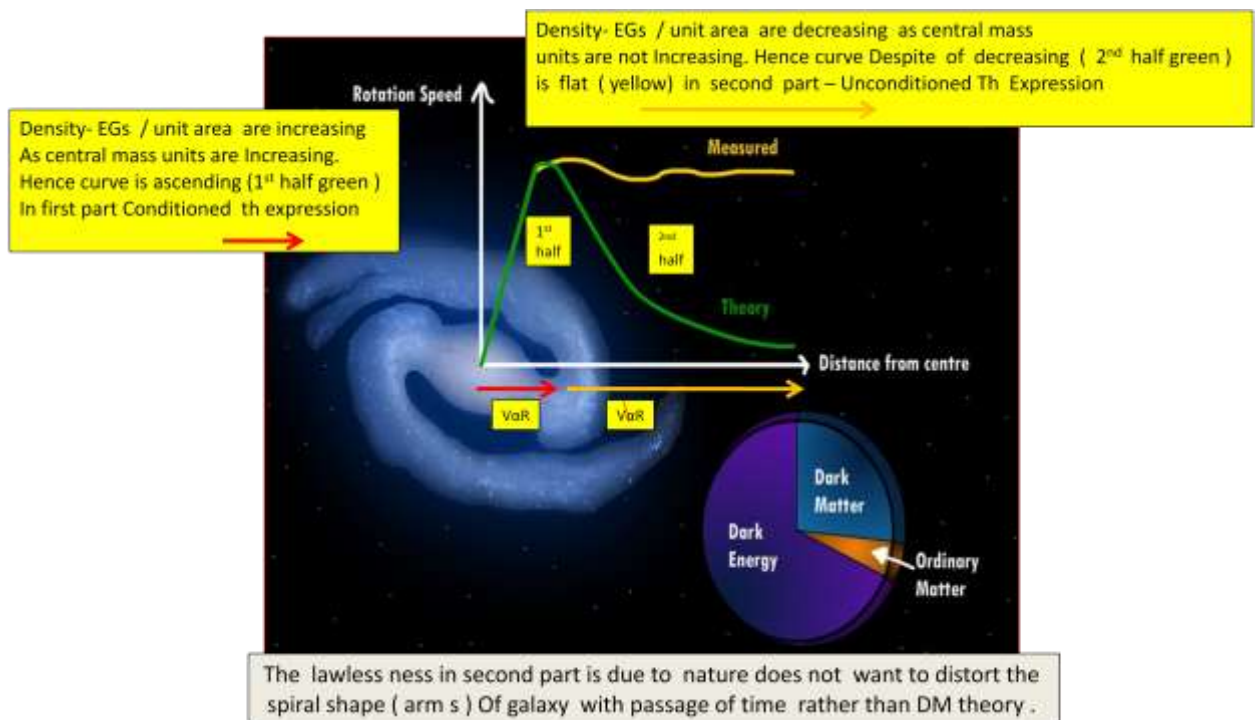


Fig 21 .2 Inner curve (first part –green) is designed by conditioned thought stimulation and the outer curve (second part - yellow) is designed by unconditioned thought expression of CCP or Divine *Modified Newtonian Dynamics* (Divine MOND)

In Kepler's decline curve, there is conditioned working of thoughts , hence rotational velocities is shown by decline curve .

In solid body the $V \propto R$. it means the CCP of solid body designs the curve by distributing the energy such that it makes straight ascending curve as atoms are connected with conscious bonds of emf making solid . It is conditioned stimulation of thoughts in solid body . [4]

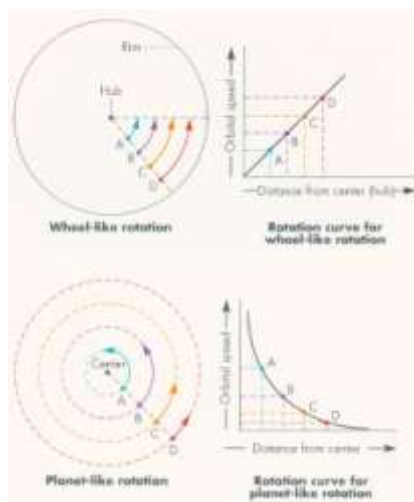


Fig 22 both are conditioned phenomenon but the thought expressions are different and reverse [4]

Now in solar system we have Divine Modified Newton's law of gravitation and it is Mind that designs this modified law.

It is represented as [3]

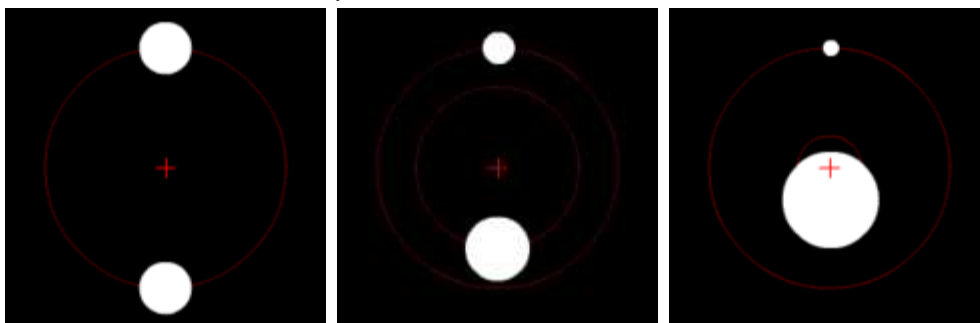
$$\begin{aligned} & \text{Amount of concentration of energized gravitons per unit area} \\ & \quad (\text{critical value of mass } M1) \times \\ & \text{Number of interacting surfaces of the } M2 \text{ (or Inertial mass of } M2) \end{aligned}$$

F α -----
 critical value of distance \wedge^2

No doubt , modified Newton's law of gravitation do work in galaxy stars but it is not like solar system modified Newton's law of gravitation . It is because expression of mind is different in both . If one is (solar system modified Newton's law of gravitation) a law of nature , then the other one (modified Newton's law of gravitation in galaxy stars) is lawlessness of nature i.e. number of interacting EGs with M2 are fixed or constant with distance , energy for work done taken by M2 is also fixed or constant with distance . Hence rotational velocity of stars or M2 are same with distance . Thus the curve is flat in outer part .These are fed thoughts and feeding was done in precreation era by Almighty B.B.B to B.B.Bs of higher centers who are involved in solar system rotational law formation as well as in galaxy rotational law formation . It is Called Divine MOND.

Gravity interactions are no more physical interactions rather they are triggered and controlled by mind of M2 or Divine *Modified Newtonian Dynamics* (Divine MOND) . In galaxy , in rotational velocity curve, there are two types of mind expression , one is conditioned (inner curve) thought expression that designs inner ascending curve and the another one is unconditioned thought expression that designs outer flat curve and that is due to not to distort shape of arms of galaxy rapidly with passage of time . Hence most of galaxies obey these laws (inner curve) and lawlessness (outer curve) of gravitation simultaneously or number of interacting EGs with M2 are fixed or constant with distance , energy for work done taken by M2 is also fixed or constant with distance . Hence rotational velocity of stars or M2 are same with distance . Thus the curve is flat in outer part. These are fed thoughts and feeding was done in precreation era by the Highest center of the universe . It is nothing to do with dark matter theory.. Nature of DM and DE could only be revealed by creation physics that Big Bang cosmology is unable to visualize. Hence Big Bang model is discarded . Last but not the least A word appealing in outer Galaxy Rotation Curves i.e slowly rising [16] or even slightly increasing [17] and it has sense i.e there is error in observation . The theory Divine MOND predicts that outer curve is not flat rather it should be slowly rising which is more correct observation.

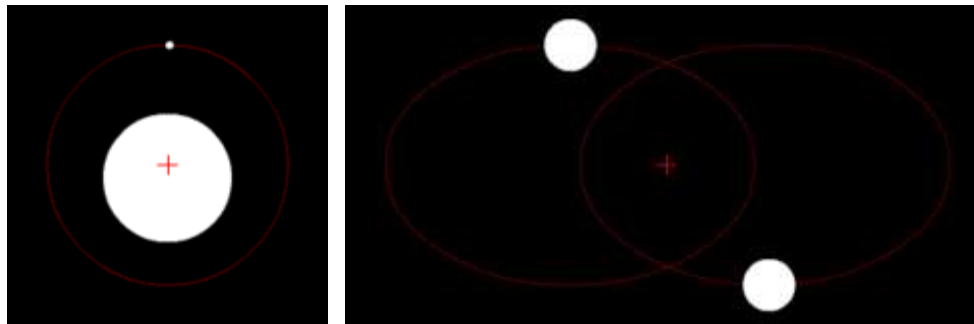
1.11 Energized Gravitons and Binary system as shown in Fig 23 . A binary system is a system of two objects in space (usually stars, but also brown dwarfs, planets, galaxies, or asteroids) which are so close that their gravitational interaction causes them to orbit about a common center of mass. Some definitions (e.g. that of double planet, but not that of binary star) require that this center of mass is not located within the interior of either object. A *multiple system* is like a binary system but consists of three or more objects.. Binary stars move in the orbit of each other gravity field [5] . But the path which is changing each time is triggered by thought of M2 . The orbital velocity is maintained by energy supplied from interaction of energized gravitons of M1 and vice versa.. Center of mass animations[edit] Images are representative, not simulated. The position of the red cross indicates the center of mass of the system [5].



(a.) Two bodies of similar mass orbiting around a common center of mass, or *barycenter*.

(b.) Two bodies with a difference in mass orbiting around a common barycenter, like the Charon-Pluto system

(c.) Two bodies with a major difference in mass orbiting around a common barycenter (similar to the Earth-Moon system)



(d.) Two bodies with an extreme difference in mass orbiting around a common barycenter (similar to the Sun–Earth system)

(e.) Two bodies with similar mass orbiting in an ellipse around a common barycenter.

Fig 23 energized gravitons and Binary system

It is to be noted that it is the mind of M2 that decides that orbital path of the M2 and how much energy is to be taken from energized gravitons to give the energy effect is also decided by M2. There is nothing like center of mass of the system. Magnitude of orbital velocity is also decided by M2. M1 only liberates energized gravitons. M1 decides the change of orbit of M2 i.e. inter orbital shift effect via first transcription message system. When M2 becomes M1 and M1 becomes M2 in binary system the same process is applied but with different thought if the effect is different. [6]

1.12 Problems with the Standard Model as shown in Fig 25 Despite being the most successful theory of particle physics to date, the Standard Model is not perfect. A large share of the published output of theoretical physicists consists of proposals for various forms of "Beyond the Standard Model" new physics proposals that would modify the Standard Model in ways subtle enough to be consistent with existing data, yet address its imperfections materially enough to predict non-Standard Model outcomes of new experiments that can be proposed. The Standard Model is inherently an incomplete theory. There are fundamental physical phenomena in nature that the Standard Model does not adequately explain:

- *Gravity.* The standard model does not explain gravity. The naive approach of simply adding a "graviton" (whose properties are the subject of considerable consensus among physicists if it exists) to the Standard Model does not recreate what is observed experimentally without as yet undiscovered other modifications to the Standard Model. Moreover, instead, the Standard Model is widely considered to be incompatible with the most successful theory of gravity to date, general relativity.
- *Dark matter and dark energy.* Cosmological observations tell us the standard model explains about 4% of the energy present in the universe. Of the missing 96%, about 27% should be dark matter, which would behave just like other matter, but which only interacts weakly with the standard model fields. Yet, the Standard Model does not supply any fundamental particles that are good dark matter candidates. The rest should be dark energy, a constant energy density for the vacuum. Attempts to explain dark energy in terms of vacuum energy of the standard model lead to a mismatch of 120 orders of magnitude.
- *Neutrino masses.* According to the standard model, neutrinos are massless particles. However, neutrino oscillation experiments have shown that neutrinos do have mass. Mass terms for the neutrinos can be added to the standard model by hand, but these lead to new theoretical problems. For example, the mass terms need to be extraordinarily small and it is not clear if the neutrino masses would arise in the same way that the masses of other fundamental particles do in the Standard Model.
- *Matter/antimatter asymmetry.* The universe is made out of mostly matter. However, the standard model predicts that matter and anti-matter should have been created in (almost) equal amounts if the initial conditions of the universe did not involve disproportionate matter relative to antimatter. Yet, no mechanism sufficient to explain this asymmetry exists in the Standard Model.
- (Observation at particle colliders of all of the fundamental particles predicted by the Standard Model has been confirmed. The Higgs boson is predicted by the Standard Model's explanation of the Higgs mechanism that describes how the weak SU(2) gauge symmetry is broken and how fundamental particles obtain mass was the last particle predicted by the Standard Model to be observed. On July 4, 2012, CERN scientists using the Large Hadron Collider announced the discovery of a particle consistent with the Higgs boson, with a mass of about $126 \text{ GeV}/c^2$. A Higgs boson was confirmed to

exist on March 14, 2013, although efforts to confirm that it has all of the properties predicted by the Standard Model are ongoing)-----[7]

The problems of standard model have been meticulously solved. (creation physics as shown in Fig 24)

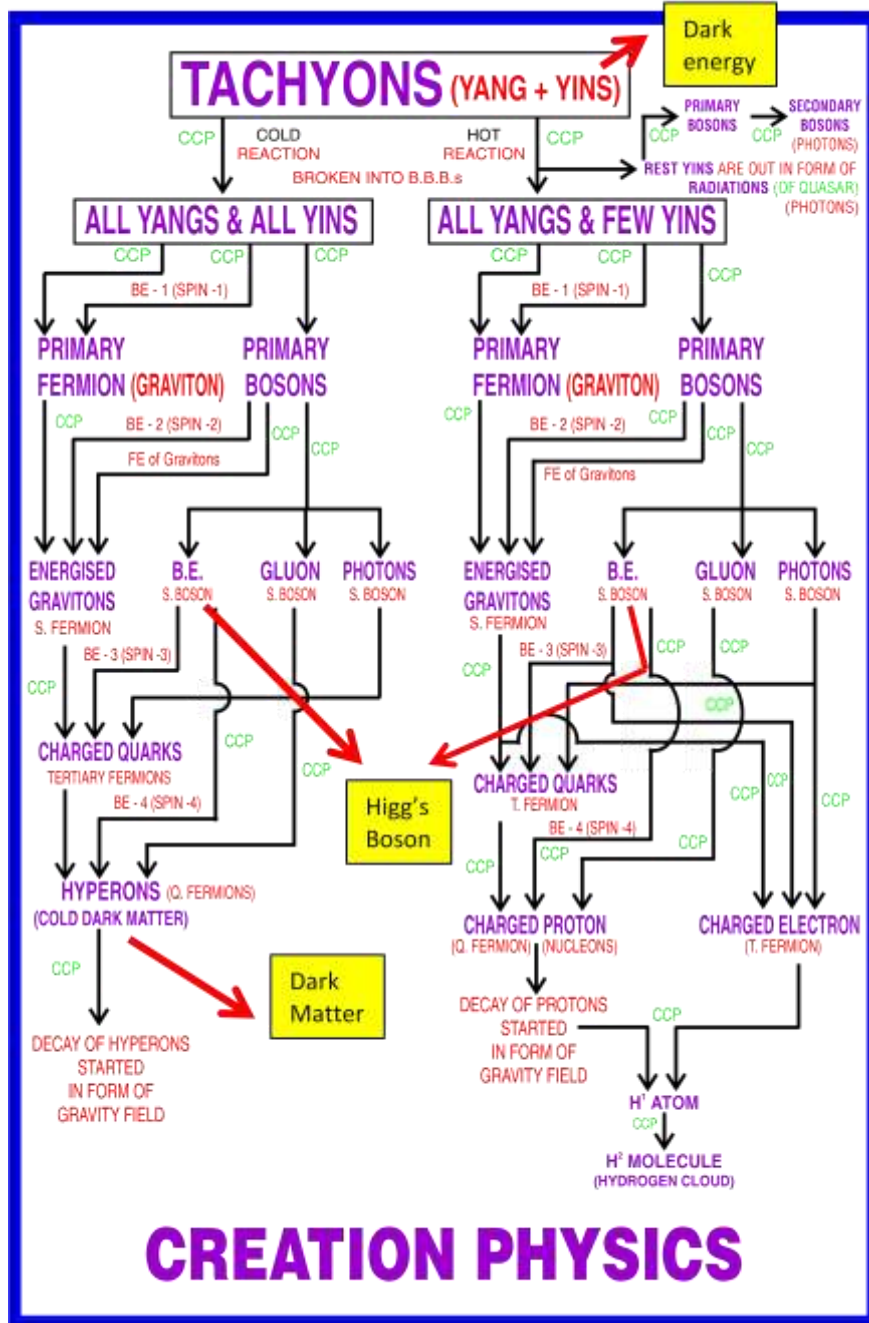
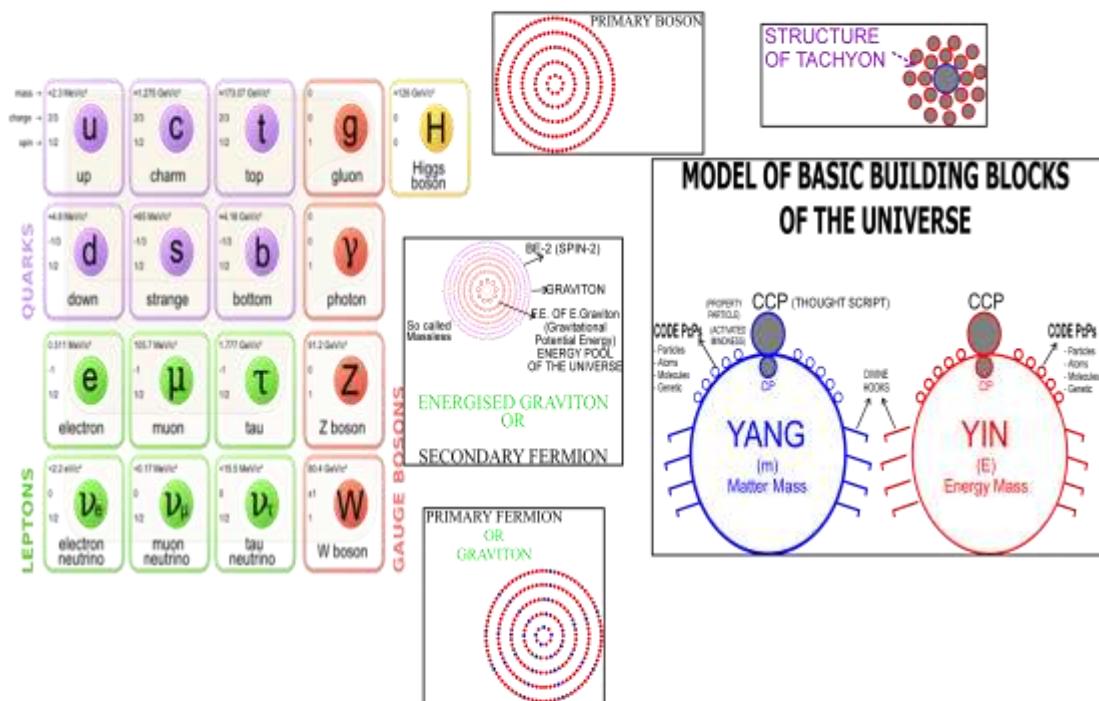


Fig 24 creation physics of continuous creation theory – Hoyle Narlikar Universe

1. Energized gravitons have been successfully discovered by participatory science. They are fermions (Yang + Yin) and they have integer spin and they have mass. They are made up of more fundamental particles called primary fermions (Yang + Yin) or gravitons. These gravitons are made up of two basic building blocks called matter basic building blocks (Yang) and energy basic building blocks (Yin). Upon these B.B.B.s atomic genes (consciousness or mind particles) are found. These are of three types – CCP, Code PCPs and CPs.
2. Dark matter is made up of Hyperons. It is made up of quarks and gluons. It forms a dark matter layer forming the boundary of the visible universe.
3. Dark energy is in the form of Tachyons found beyond the dark matter layer and quasars in the invisible universe and dark energy is also found in the form of Functional energy of energized gravitons.

4. Matter and Anti matter- Nature did not create antimatter particles with creation of hydrogen and hyperons (CDM layer) (see creation physics figure 24) . Antimatter particles are created in bubble chamber only These are due to fed thoughts and feeding was done in pre creation era by the Highest center of the universe. .
5. Higgs bosons have been created during creation of hydrogen in quasars. It has been confirmed. According to participatory science they are Binding energy (B.E.) -3, 4,and 5 . Creation of Helium atom (25%) will be discussed separately.
6. Standard Model is modified and completed with addition of energized gravitons (g), primary bosons , primary fermions and Basic Building Blocks and Mind (atomic genes) and Tachyons as shown in Fig

25



Standard model completed with Fundamental particles and Mind And Tachyons

Fig 25 standard Model chart

1.13 Atomicgenetics and pulsar [8]

To understand Pulsars we have to understand three things one is how does nature work and unconditioned thought expressions of basic building blocks . Third thing we have to understand is how physics laws (atomic genes) work.

LAWS ON WHICH ATOMIC GENES WORK

Having read **Atomic genetics and Basic etiology of the cancer**, now we discuss how atomic genetics trigger molecular effects like genetic damage etc during carcinogenesis. **ATOMIC GENETICS** is a new branch of science in which we study about **Laws, PROPERTIES** and **FUNCTIONS** of atomic genes. Now I shall highlight the laws on which atomic genes work. As we have seen that Gregor Mendel had made three laws of inheritance known as ---

1.The principle of Dominance---- Mendel therefore concluded that what were transmitted from parent to offspring were discrete factors. Each factor contained information about the form of the trait. The factor associated with the form which was expressed in the hybrid offspring (F1) was **DOMINANT**. For example, the factor for yellow seed color was a dominant factor. The factor associated with the form which remained hidden in the **F1** but reappeared in the **F2** was **RECESSIVE**, Thus the factor for the green seed color was recessive. Mendel's factor is now recognized as the gene. In atomic genetics this law is interpreted like this ---- During atomic transcription or thought expressions few thoughts are expressed and these are called dominating thoughts and rest thoughts which are not expressed are

called recessive thoughts. Thus particles, atoms and molecules show only those properties which are triggered by dominating thought expressions. **During transmutation, dominating thoughts get recessive while recessive thoughts get dominant.** Single effect or property is triggered by single dominating thought expression or atomic transcription.

For example-- Normal genetic arrangements are triggered by normal arrangement genetic dominating thought expressions while genetic damage is triggered by abnormal arrangement genetic dominating thought expressions. Abnormal arrangement genetic thought expression is triggered by carcinogens only after normal arrangement genetic thought expressions get recessive. Or we can say normal genetic arrangement are triggered by normal arrangement genetic thought expressions and when carcinogens come in contact with the cell, they shift the thought expression from normal to abnormal genetic arrangement. With the result we observe genetic damage. Thus carcinogens suppress dominating normal arrangement genetic thoughts and they trigger abnormal arrangement recessive genetic thoughts. With the result genetic damage is seen.

2.The Principle of Segregation---The principle of segregation states that allele pairs separate or segregate during gamete formation, and the paired condition is restored by random fusion of gametes during fertilization. In atomic genetics it will be interpreted like this --- There is separate atomic transcription for separate effects. So if there are hundred effects, they all are triggered by hundred separate thought expressions or atomic transcriptions.

For example --- Genetic damage is triggered by separate thought expression and rapid growth is triggered by separate thought expression and dedifferentiation is triggered by separate thought expression. And all these thought expressions are triggered by carcinogens. **But the timing of thought expressions is different.** Genetic damage thought expression is first to trigger and later rapid growth and dedifferentiation thought expressions.

3. The Principle of independent assortment--- The principle of independent assortment states that if we consider the inheritance of two or more genes at a time, their distribution in the gametes and in the progeny of subsequent generations is independent of each other. In atomic genetics it will be interpreted like this--- In one phenomenon, if two or more than two transcriptions or thought expressions are expressed that will give rise to two or more than two effects, **it does not mean that their expression is DEPENDENT ON EACH OTHER.**

For example --- In phenomenon of carcinogenesis, there is effect of genetic damage, there is effect of rapid growth and there is effect of dedifferentiation. All these effects are triggered by separate thought expressions. The simultaneous expression of these atomic transcriptions is independent of each other. Or these thoughts expressions are the part of the carcinogenesis phenomenon but their expressions are independent of one another. **It does mean that for rapid growth thought expression, genetic damage thought expression is NOT essential.**

Having informed about the laws and working of atomic genes, Now we discuss phenomenon of carcinogenesis, which is triggered by, outer stimuli like physical, chemical carcinogens or virus or they are self stimulated i.e. hereditary factors.

Now how these laws could be interpreted in pulsar phenomenon.

It is the loss of the pulsar's spin energy which eventually appears as radiation across the electromagnetic spectrum, including gamma-rays. Both observations and models indicate that pulsars eventually lose the ability to emit gamma-rays as the pulsar slowly takes longer and longer to rotate.

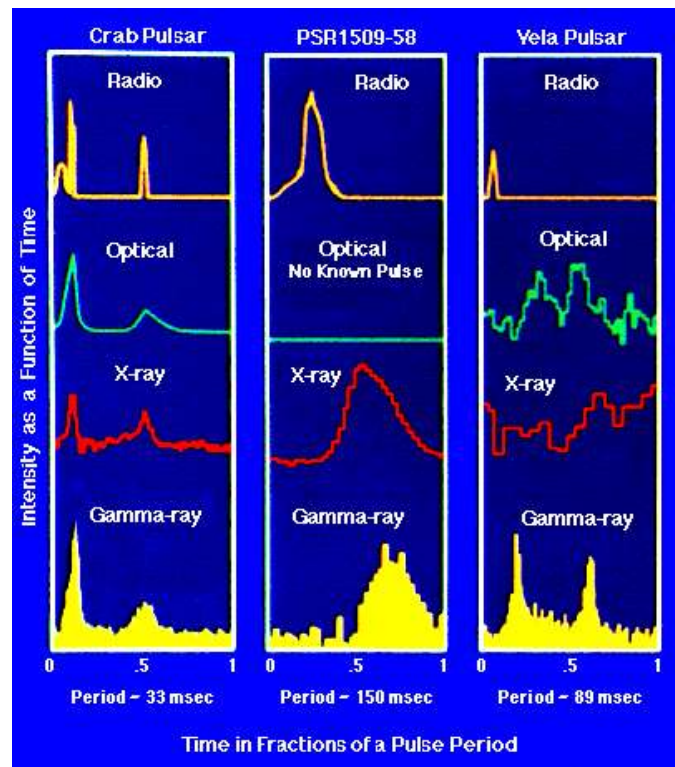


Fig 26 Here are three pulsars and there are seven effects . These effects are triggered by thoughts of higher center present in these three pulsars. [9]

1.The principle of Dominance—Pulsar which is rotating fast emits gamma rays more while pulsar rotating slow emits radio waves more.. It does mean that thoughts of gamma waves emission are dominating in rapid rotating pulsar while thought of radio waves emission is dominating in slow rotating pulsar. Optical waves emission is absent in rapid rotating pulsar. It means thoughts to generate optical emission is suppressed in fast rotating pulsar.

2.The Principle of Segregation---There are four effects in rotating pulsars. These effects are gamma rays emission, xray emission, optical waves emission and radio waves emission. All these four effects are triggered by four separate thoughts . Similarly rapid rotation pulsar and slow rotation pulsar have their separate triggering thoughts (numerical mindness) of rapid rotation and slow rotation.

3.The Principle of independent assortment--- There are four effects one is rapid rotation which is triggered by rapid rotation thought and it is associated with gamma rays emissions thought . Similarly slow rotation of pulsar is triggered by thought of slow rotation and it is associated with radio wave emission thought. It does not mean that we take it for granted that that rapid rotating pulsar is associated with gamma rays emission and slow rotating pulsar is associated with radio waves emission. All thoughts which are expressing are independent of each other . In the other words for rapid rotation effect gamma radiation is not essential and for slow rotation pulsar radio waves radiation is not essential. No two effects or more than two effects are related with each other rather they are independent and their triggering of thought is also independent of each other . please see Magnetar With Radio Beams (figure 29 exception [10])

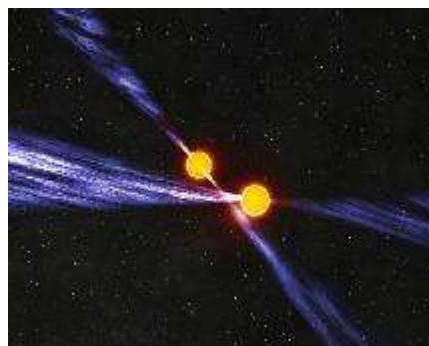


Fig 27 Image Credit: *John Rowe Animation* [11] The double pulsar system. Click on this picture to get the full animation

The interior structure of neutron stars [11] Neutron stars are only the size of a city and are very far away yet astronomers can work out what is going on beneath their surfaces - how? They do this by looking for small changes in the rotation of the pulsar. We have already mentioned that pulsars slow down as they get older. However, for a few pulsars they suddenly start spinning faster (in a very short space of time) and then slowly return to their original spin rate; that is they glitch. The Crab pulsar which is in the Crab nebula (shown in a picture above) has been observed to do this many times. The reason for glitching is not very well understood and is actively being investigated. However, current explanations suggest that glitches are probably due to the way the interior superfluid of a neutron star interacts with the crystalline surface. [11]

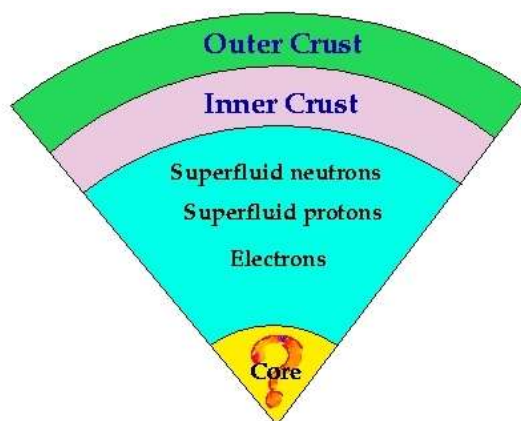


Fig 28 The interior structure of a neutron star consists of iron, neutron rich nuclei and electrons in the outer crust. The inner crust contains neutron rich nuclei, free superfluid neutrons and electrons and the interior, superfluid neutrons, superfluid protons and electrons. The makeup of the core is unknown.)

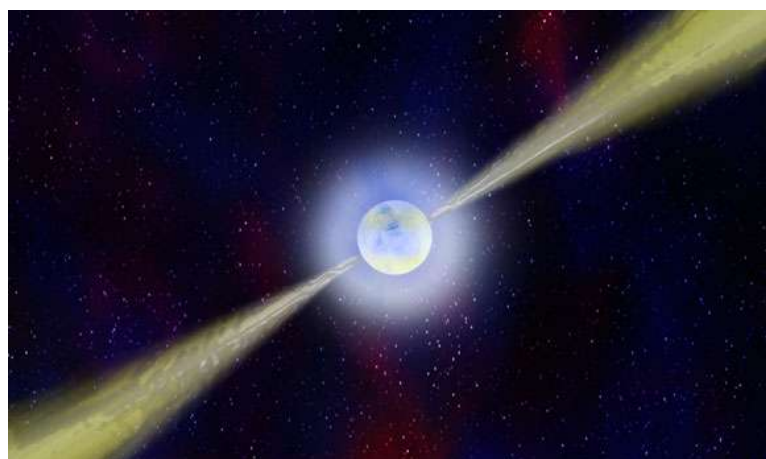


Fig 29 Artist's Conception of Magnetar With Radio Beams [10]

The magnetar, as shown in Fig 29 approximately 10,000 light-years from Earth in the direction of the constellation Sagittarius, is emitting powerful, regularly-timed pulses of radio waves just like radio pulsars, which are neutron stars with far less intense magnetic fields. Usually, magnetars are visible only in X-rays and sometimes very weakly in optical and infrared light."No one has ever found radio pulses coming from a magnetar before. We thought that magnetars didn't do this," said Fernando Camilo of Columbia University. "This object is going to teach us new things about magnetar physics that we would never have learned otherwise," Camilo added. [10] Physicists have thought that magnetar is not associated with radio waves emission as it has high magnetic field with high rotation. But on the contrary it is associated with radio waves . Hence according to Law of independent assortment no two or more than two thoughts which are expressing are dependent on each other . In addition, unlike normal pulsars, the object's radio emission fluctuates in strength from day to day, and the shape of the pulsations changes as well. These variations likely indicate that the magnetic fields around the pulsar are changing as well. What's causing this behavior? At the moment, the scientists believe that the magnetar's intense magnetic field is twisting, causing changes in the locations where huge electric currents flow along the magnetic-field lines. These currents likely generate the radio pulsations. [10]

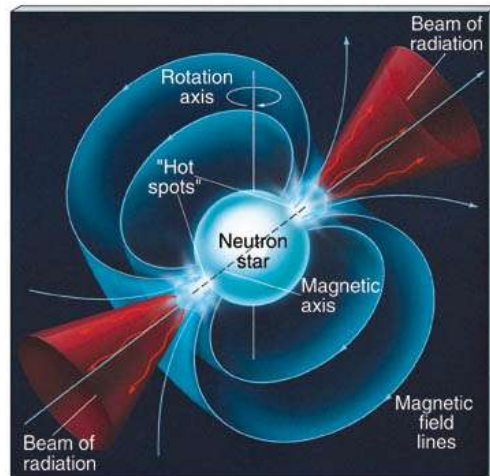


Fig 30 model of Pulsar

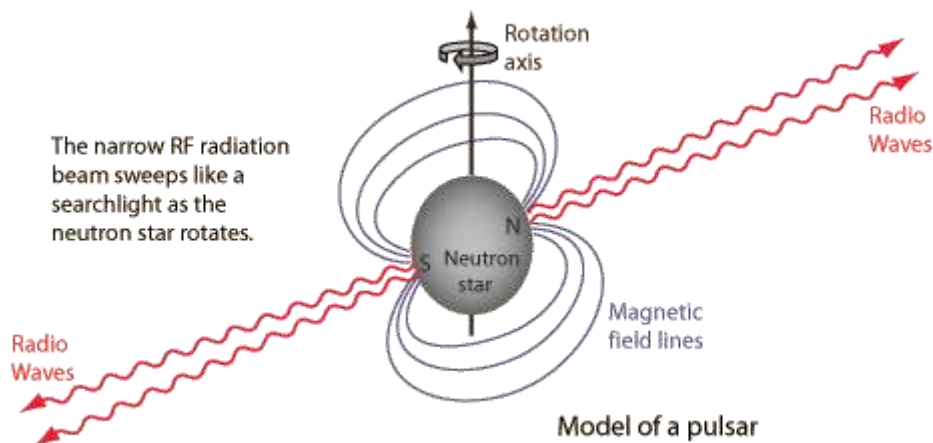


Fig 30.1 model of pulsar [12]

Axis of spin is different from axis of magnetic field . While axis of radio emission and axis of magnetic fields are same . The designing of axis is triggered by thought of axis of that effect . Hence different axis of working are produced. Same is true for axis of radio- emissions. Radio emissions are being generated on the surface of pulsar as HOT spots . [12]

Neutron degeneracy is a stellar application of the Pauli Exclusion Principle, as is electron degeneracy. No two neutrons can occupy identical states, even under the pressure of a collapsing star of several solar masses. For stellar masses less than about 1.44 solar masses (the Chandrasekhar limit), the energy from the gravitational collapse is not sufficient to produce the neutrons of a neutron star, so the collapse is halted by electron degeneracy to form white dwarfs. Above 1.44 solar masses, enough energy is available from the gravitational collapse to force the combination of electrons and protons to form neutrons. As the star contracts further, all the lowest neutron energy levels are filled and the neutrons are forced into higher and higher energy levels, filling the lowest unoccupied energy levels. This creates an effective pressure which prevents further gravitational collapse, forming a neutron star. However, for masses greater than 2 to 3 solar masses, even neutron degeneracy can't prevent further collapse and it continues toward the black hole state. [12]

When very large stars die, they go out with a huge explosion called a supernova. The outer layers of the star are ejected outwards in a magnificent, extremely bright explosion that can outshine an entire galaxy; the inner core of the star collapses inwards, and if the core is between 1.4 and 3 times the mass of our sun, it forms a neutron star. A physicist named Chandrasekhar Subrahmanyan theorized that if the mass of the core of the collapsing star was 1.4 times the mass of the star itself, the protons and electrons would combine to form neutrons in a neutron star. This number is known today as the Chandrasekhar limit. If this limit is not achieved by the collapsing core, a white dwarf star will be produced instead. If the limit is much greater, a black hole may be the result.

The end product of a supernova event associated with stars greater than about 8-10 solar masses is a Neutron star, with such strong internal pressures that neutrons are formed by intense squeezing together of protons and electrons (remember: $p + e \rightarrow n$); these neutrons are also degenerate. (Degenerate matter describes a condition

in which the pressures exerted by the mass [as in a gaseous state] no longer depend on temperature but only on the [high] density reached at this stage; the matter is said to no longer obey the classical laws of physics). During the formation of a neutron star, the prior state star (which may have a core as heavy as iron) develops a degeneration pressure that rises until it is capable of halting further gravity-driven collapse down to a remarkably tiny size.

Pulsars are formed by the neutron star's immense gravity pulling gas from supernova debris, such that this gas is accelerated to a third or more of the speed of light (thus approaching relativistic speeds [those near light speed] and "detonates" when it strikes the neutron star surface. The magnetic field tends to funnel the fast-moving gas and particles onto narrow parts of the neutron star's surface which become "hot spots(figure 30). This releases great quantities of energy extending in the spectrum from radio to x-ray regions. There are thousands of bursts of energy that rise from the surface many times each second giving rise to the periodicity detected by radio telescopes and by x-ray observatories such as Chandra . The magnetic field causes the neutron star to emit strong radio waves and radioactive particles from its north and south poles.

A neutron star is about 20 km in diameter and has the mass of about 1.4 times that of our Sun. This means that a neutron star is so dense that on Earth, one teaspoonful would weigh a billion tons! Because of its small size and high density, a neutron star possesses a surface gravitational field about 2×10^{11} times that of Earth. Neutron stars can also have magnetic fields a million times stronger than the strongest magnetic fields produced on Earth. Neutron stars are one of the possible ends for a star. They result from massive stars which have mass greater than 4 to 8 times that of our Sun. After these stars have finished burning their nuclear fuel, they undergo a supernova explosion. This explosion blows off the outer layers of a star into a beautiful supernova remnant. The central region of the star collapses under gravity. It collapses so much that protons and electrons combine to form neutrons. Hence the name "neutron star".[13]

What is a Pulsar and What Makes it Pulse? [13]

Simply put, pulsars are rotating neutron stars. And pulsars appear to pulse because they rotate!

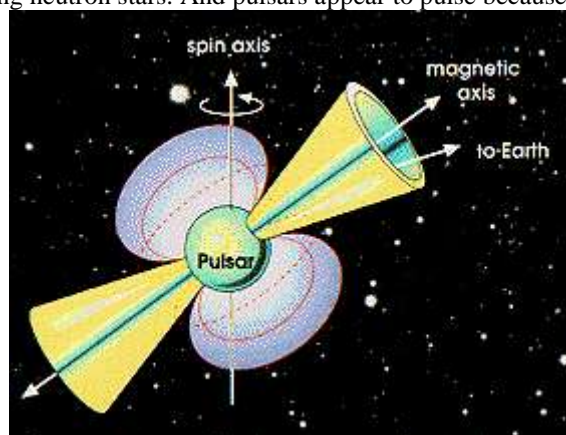


Fig 31 A diagram of a pulsar, showing its rotation axis and its magnetic axis

Although all pulsars are neutron stars, not all neutron stars are pulsars, and not all pulsars shine in the same way. X-ray pulsars in particular illustrate several ways in which pulsar emission can originate:

1.Magnetospheric Emission: Like gamma-ray pulsars, X-ray pulsars can be produced when high-energy electrons interact in the magnetic field regions above the neutron star's magnetic poles. Pulsars seen this way, whether in the radio, optical, X-ray, or gamma-ray, are often referred to as "spin-powered pulsars," because the ultimate source of energy comes from the neutron star's rotation. The eventual loss of rotational energy results in a slowing of the pulsar spin period.

2.Cooling Neutron Stars: When a neutron star is first formed in a supernova, its surface is extremely hot (more than 1 million degrees). Over time, the surface cools. While the surface is still hot enough, it can be seen with X-ray telescopes. If some parts of the neutron star are hotter than others, such as the magnetic poles, then pulses of thermal X-rays from the neutron star surface can be seen as the hot spots pass through our line of sight. Some pulsars, including Geminga (see above), show both thermal and magnetospheric pulses.

3.Accretion: If a neutron star is in a binary system with a normal star, the powerful gravitational field of the neutron star can pull material from the surface of the normal star. As this material spirals around the neutron star, it is funneled by the magnetic field toward the neutron star magnetic poles. In the process, the material is heated until it becomes hot enough to radiate X-rays. As the neutron star spins, these hot regions pass through the line of sight from Earth and X-ray telescopes see these as X-ray pulsars. Because the gravitational pull on the material is the basic source of energy for this emission, these are often called "accretion-powered pulsars." [14]

"The theory of how pulsars emit their radiation is still in its infancy, even after nearly forty years of work," says Werner Becker, Max-Planck Institut für extraterrestrische Physik, Garching, Germany. There are many models but no accepted theory. Now, thanks to new XMM-Newton observations, Becker and colleagues may have found a crucial piece of the puzzle that will help theorists explain why cooling neutron stars have hotspots at their polar regions. Neutron stars are formed with temperatures of more than billion (10¹² K) degrees during the collapse of massive stars. As soon as they are born they begin to cool down. How they cool must depend on the physical properties of the superdense matter inside them. Observations with previous X-ray satellites have shown that the X-rays from cooling neutron stars come from three regions of the pulsar. Firstly, the whole surface is so hot that it emits X-rays. Secondly, there are charged particles in the pulsar's magnetic surroundings that also emit X-rays as they move outwards, along the magnetic field lines. Thirdly, and crucially for this latest investigation, younger pulsars show X-ray hotspots at their poles. Until now, astronomers believed that hotspots are produced when the charged particles collide with the pulsar's surface at the poles as shown in Figure 30. However, the latest XMM-Newton results have cast doubt on this view. [15]

Having informed about pulsar participatory science concludes following inferences

1. As entire gas (charged particles) has transformed into neutrons , hence no gas activity is there . Hot spots are formed by thoughts of transformation of gravitational energy of energized gravitons into photons of different radiations (gamma to radio photons) which are being emitted from the neutron star. The entire gas particles have lost in space in supernova blast. It is the core elements that form neutron star that too by thought. All thoughts are fed thoughts and feeding was done by Highest center of the universe during pre creation era . Hence our universe is deterministic universe and phenomenon of determinism is conducted by atomic genes.
2. Any changing effect means changing in thought of that either by conditioned stimulation or by unconditioned stimulation . Change in radio emission has nothing to do with change in magnetic field as both are triggered by separate thought and their triggering is independent of each other . Radio pulsations are not being generated by huge electrical current flow . Generation of magnetic field (photons), electric current (photons) and radio pulsations (Photons) all are generated by energized gravitons (energy pool of universe). Even spinning of pulsar receives energy from energized gravitons (energy pool of universe) . It is the thought of spinning that decides the rotation rate (numerical mindness) and spinning phenomenon . Hence rapid rotation and slow rotation all are being triggered by thoughts (numerical mindness) .
3. Any new event in sun's life is triggered by separate thought of that event . Hence it is the thought that forms neutron star rather than the 1.4 to 3 times mass of our sun. It is an illusion that Chandrasekhar limit decides the fate of dying star . It is the thought that transform protons and electrons into neutrons making all elements to be transformed into neutrons . It is the thought of collapse that form the size of neutron star rather than self gravitation . There is no phenomenon of self gravitation . It is the thought that triggers the gravitational effect of neutron stars . Normally in atom neutrons do not have gravity effect. They only play gravity effect while they form neutron star. It is the thought that triggers transformation of gravitational energy (energy pool of universe) into different other energies (magnetic energy , electrical energy , radiations - gamma , xray, light and radio emission, and spin energy)

SELF GRAVITY

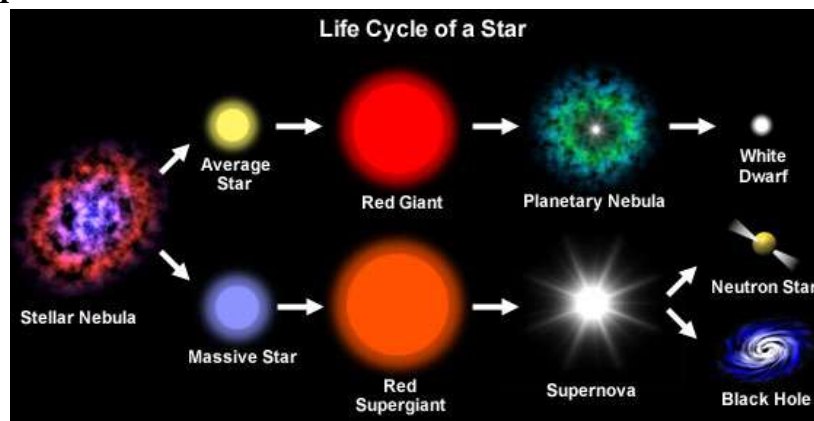


Fig 31.1 Life cycle of star and Chandrasekhar Limit

There is nothing like self gravity phenomenon. The nebula used to collapse to form celestial object (sun , planets, satellites and asteroids or comet) only when thought of collapse was triggered. Reaching up to a desired collapse , it is the **thought of halt** that prevents its further collapse. All thoughts are fed thoughts and feeding was done in pre creation era by the highest center of the universe.

It is the higher center in sun that triggers the collapse phenomenon . The messages are shifted to lower centers of atoms and particles of sun to be involved in collapse phenomenon. Having received the messages by lower centers, the messages are shifted to target B.B.Bs , mind and mass (B.B.Bs) of Target units start collapsing . With the result we observe collapse phenomenon. Same mechanics is applied for halting of collapse.

Hence it is the thought that triggers the collapse and halt of collapse rather than any degeneracy (electron or neutron) during celestial body formation i.e. formation of white dwarf or neutron star or so called black hole (black massive body) formation . The size of the our sun is not being maintained by balance of radiation pressure (heat pressure) vs gravitational collapse . It is due to thought of that size (numerical mindness activated) . During red giant formation this numerical mindness changes with the result size of the sun increases at the end of the stage of star. It has nothing to do with Chandrasekhar limit of 1.44 solar masses . The formation of red Giant is decided due to triggering of that thought rather than the mass of the sun . Hence it is illusion that sun masses decide the fate of star . Hence theory given by Prof Chandrasekhar for formation of White dwarf, neutron star or so called Black hole is a wrong theory as shown in Fig 31.1 .

It is the type of seed masses that doesnot decide the type of plant or tree formation rather it is the MIND in side seed mass that decides the type of plant or tree to be formed .

DISCUSSION To answer how laws of physics are made is now easy due to the research of fundamental particles i.e. B.B.Bs and Atomic Genetics. Mathematics alone is unable to explore the reality behind any classical and quantum phenomena. Participatory science is ultimate science to know about any phenomenon of the universe. Without this science, **transparency** in explaining any phenomenon **is absent**. Biological Aspects should be taken into consideration while making the curriculum of physics at the undergraduate level. Conceptual functions and understanding of **MIND** would give a better understanding of physical phenomena during their course at undergraduate level. **The theory of every thing is THOUGHT EXPRESSION rather than any thing else. If the phenomenon has not been explained by MIND , it is wrong theory . Hence theory given by Prof Chandrasekhar for formation of White dwarf, neutron star or so called Black hole is a wrong .**

1.14 The Royal Swedish Academy of Sciences 13 October 1993

The Royal Swedish Academy of Sciences has decided to award the Nobel Prize Physics for 1993 jointly to **Russell A. Hulse** and **Joseph H. Taylor, Jr**, both of Princeton University, New Jersey, USA **for the discovery of a new type of pulsar, a discovery that has opened up new possibilities for the study of gravitation**

Gravity investigated with a binary pulsar

The discovery rewarded with this year's Nobel Prize in Physics was made in 1974 by **Russell A. Hulse** and **Joseph H. Taylor, Jr** using the 300-m radiotelescope at Arecibo, Puerto Rico, West Indies. Taylor, then Professor at the University of Massachusetts, Amherst, and his research student Hulse were searching systematically for pulsars - a kind of rapidly rotating cosmic beacon with a mass somewhat greater than that of the sun and a radius of about ten kilometres. (A human being on the surface of a pulsar would weigh some hundred thousand million times more than on Earth.) The pulsar's "beacon light" is often within the radio wave region.

The first pulsar was discovered in 1967 at the radioastronomy laboratory in Cambridge, England (**Nobel Prize 1974** to Antony Hewish). What was new about the Hulse-Taylor pulsar was that, from the behaviour of the beacon signal, it could be deduced that it was accompanied by an approximately equally heavy companion at a distance corresponding to only a few times the distance of the moon from the earth. The behaviour of this astronomical system deviates greatly from what can be calculated for a pair of heavenly bodies using Newton's theory. Here a new, revolutionary "space laboratory" has been obtained for testing Einstein's general theory of relativity and alternative theories of gravity. So far, Einstein's theory has passed the tests with flying colours. Of particular interest has been the possibility of verifying with great precision the theory's prediction that the system should lose energy by emitting gravitational waves in about the same way that a system of moving electrical charges emits electromagnetic waves.

The significance of the discovery of the binary pulsar

The discovery of the first binary pulsar is primarily of great significance for astrophysics and gravitational physics. Gravity is the oldest known natural force, the one we are most aware of in daily life. At the same time it is in one sense the force that is hardest to study since it is so much weaker than the other three natural forces: the electromagnetic force and the strong and the weak nuclear forces. The development of technology and science since the second World War with rockets, satellites, space voyages, radioastronomy, radar technology and the precise measurement of time using atomic clocks has led to a renaissance of the study of this earliest-known natural force. The discovery of the binary pulsar represents an important milestone in this historical development.

Relativity theory and gravitational physics

According to Albert Einstein's general theory of relativity, gravity is caused by changes in the geometry of space and time: space-time curves near masses. Einstein presented his theory in 1915 and became a world celebrity when in 1919 the English astrophysicist Arthur Eddington announced that one of the predictions of the theory, the deflection of starlight passing near the surface of the sun - "the light is drawn towards the sun" - had been verified during solar eclipse expeditions. This deflection of light, together with a small general-relativity contribution to the perihelion motion of mercury (a slow rotation of Mercury's elliptical orbit round the sun), was for several decades the only, partly rather uncertain, support for Einstein's theory.

For a long time the theory of relativity was considered aesthetically very beautiful and satisfying, probably correct, but of little practical significance to physics except in applications in cosmology, the study of the origin, development and structure of the universe.

Attitudes to the general theory of relativity changed, however, during the 1960s when both experimental and theoretical developments made gravitational physics a topical part of physics. New opportunities for precise experiments, based on satellite and radar technology, opened up. In particular, the research of the Americans R. Dicke and I. Shapiro contributed to this. Dicke performed precision experiments in which the sun's gravitational field on the earth was used for verifying what is termed the equivalence principle, the identity between gravitational and inertial mass - one of the basic principles of the general theory of relativity (and also of several alternative gravitation theories). Important contributions were also Shapiro's theoretical prediction and experimental verification, using radar echoes from Mercury, of a new consequence of the general theory of relativity - a time-delay effect for electromagnetic signals passing through gravitational fields.

All these experiments, however, were confined to our solar system with its very weak gravitational fields and consequently small deviations, hard to measure, from the Newtonian theory of gravity. Hence it was possible to test the general theory of relativity and other theories only in the first post-Newtonian approximation.

The discovery of the binary pulsar

Hulse's and Taylor's discovery in 1974 of the first binary pulsar, called PSR 1913 + 16 (PSR stands for pulsar, and 1913 + 16 specifies the pulsar's position in the sky) thus brought about a revolution in the field. We have here two very small astronomical bodies, each with a radius of some ten kilometres but with a mass comparable with that of the sun, and at a short distance from each other, only several times the moon's distance from the earth. Here the deviations from Newton's gravitational physics are large. As an example may be mentioned that the periastron shift, the rotation of the elliptical orbit that the pulsar (according to Kepler's first law from the beginning of the 17th century) follows in this system, is 4 degrees per year. The corresponding relativistic shift for the most favourable example in our solar system, the above-mentioned perihelion motion of Mercury, is 43 seconds of arc per century (this is less than a tenth of the very much larger contributions to the perihelion motion caused by perturbations from other planets, chiefly Venus and Jupiter). The difference in size between the shifts is partly due to the orbital speed in the binary pulsar, which is almost five times greater than Mercury's, and partly due to the pulsar performing about 250 times more orbits a year than Mercury. The orbiting time of the binary pulsar is less than eight hours, which can be compared with the one month our moon takes to orbit the earth.

A very important property of the new pulsar is that its pulse period, the time between two beacon sweeps (0.05903 sec) has proved to be extremely stable, as opposed to what applies to many other pulsars. The pulsar's pulse period increases by less than 5% during 1 million years. This means that the pulsar can be used as a clock which for precision can compete with the best atomic clocks. This is a very useful feature when studying the characteristics of the system.

The very stable pulse period is in fact a mean of the pulse period observed on earth over the time of one orbit of the pulsar system. The observed period actually varies by several tens of microseconds, i.e. by an amount that is much greater than the variation in the mean value. This is a Doppler effect, and led to the conclusion that the observed pulsar moves in a periodic orbit, meaning that it must have a companion. As the pulsar approaches the earth, the pulses reach the earth more frequently; as it recedes they arrive less frequently. From the variation in pulse period, conclusions can be drawn about the pulsar's speed in its orbit and other important features of the system.

Demonstration of gravitational waves

A very important observation was made when the system had been followed for some years. This followed theoretical predictions made shortly after the original discovery of the pulsar. It was found that the orbit period is declining: the two astronomical bodies are rotating faster and faster about each other in an increasingly tight orbit. The change is very small. It corresponds to a reduction of the orbit period by about 75 millionths of a second per year, but, through observation over sufficient time, it is nevertheless fully measurable. This change was presumed to occur because the system is emitting energy in the form of gravitational waves in accordance with what Einstein in 1916 predicted should happen to masses moving relatively to each other. According to the latest data, the theoretically calculated value from the relativity theory agrees to within about one half of a percent with the observed value. The first report of this effect was made by Taylor and co-workers at the end of 1978, four years after the discovery of the binary pulsar was reported.

The good agreement between the observed value and the theoretically calculated value of the orbital path can be seen as an indirect proof of the existence of gravitational waves. We will probably have to wait until next century for a direct demonstration of their existence. Many long-term projects have been started for making direct observations of gravitational waves impinging upon the earth. The radiation emitted by the binary pulsar is too weak to be observed on the earth with existing techniques. However, perhaps the violent perturbations of matter that take place when the two astronomical bodies in a binary star (or a binary pulsar) approach each other so closely that they fall into each other may give rise to gravitational waves that could be observed here. It is also hoped to be able to observe many other violent events in the universe. Gravitational wave astronomy is the latest, as yet unproven, branch of observational astronomy, where neutrino astronomy is the most direct predecessor. Gravitational wave astronomy would then be the first observational technique for which the basic principle was first tested in an astrophysical context. All earlier observational techniques in astronomy have been based on physical phenomena which first became known in a terrestrial connection.

Nobel Prize 1993 physics - The discovery of a new type of pulsar, a discovery that has opened up new possibilities for the study of gravitation

It has nothing to do With new type of pulsar

It has nothing to do With Einstein General Relativity

How Pulsar forms and How they work (Divine Mechanism) is absent in Work .

The mechanics of periastron shift, the rotation of the elliptical orbit that of pulsar is - divine mechanics rather than general relativity

DM (EGs /unit area) forms Gravity And DE (energy pool of the universe) forms Different energy effects of Pulsars . It is Mind That designs different types of pulsars .

It is law of independent assortment that decides The combinations of rotation rates and emission Of different electromagnetic radiations . All are triggered by separate thoughts.

It is binary pulsar Orbiting in the gravity of one another And it is Divine MOND mechanics That works while orbiting

Fast rotating objects loose energy in form of gravitational waves. is myth

In nut shell it is incomplete depiction and discovery is not award wining . Hence marks allotted 0 out of 10

Fig 32 The radio waves from a pulsar are emitted in two bunches which sweep across space at the same rate as the pulsar rotates (upper figure). From a binary pulsar, gravitational waves are also emitted (lower figure). Incomplete depiction . Marks allotted to work Zero out of 10

II. Structure

2.1 complete depiction as well as gravity is not waves

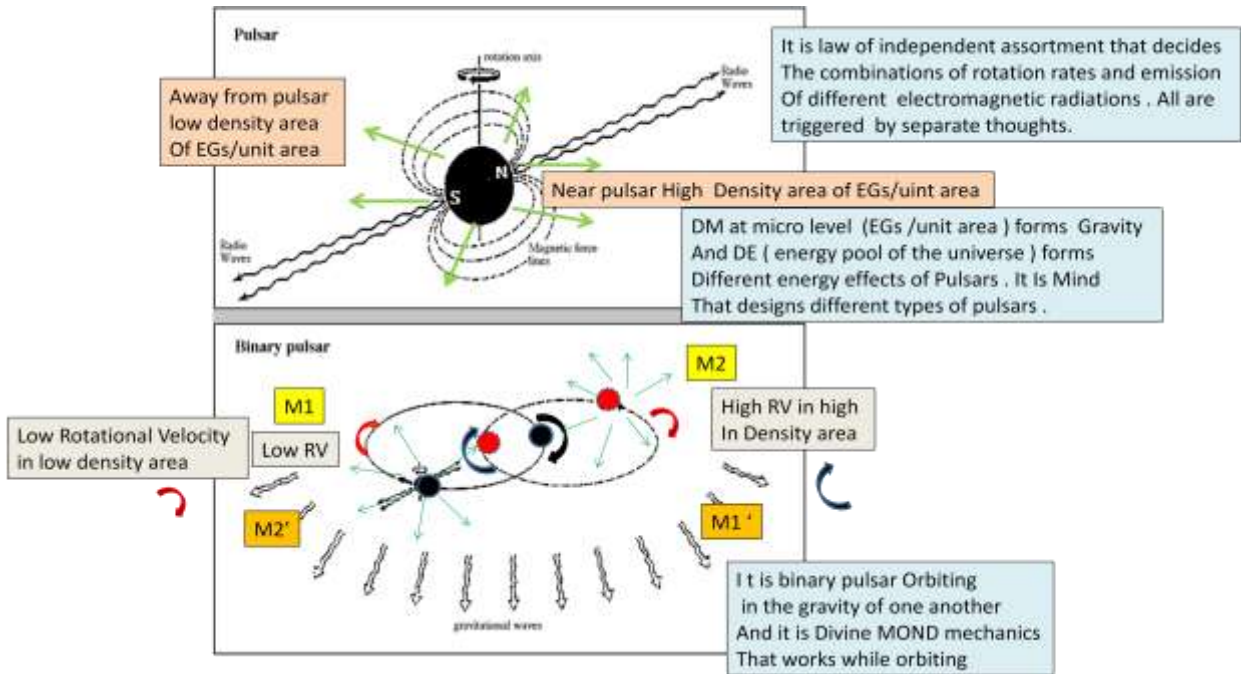


Fig 33 Now complete depiction as well as gravity is not waves (wave theory) rather it is particles made up of EGs moving in wave pattern with velocity of light . Density of EGs /unit area near pulsar is more and it decreases as we move away from it . It violates Kepler's 1st law . It is divine MOND mechanics that make them orbiting in gravity of each other .

2.2. What is Kepler's Law

Kepler's First Law: as shown in Fig 34 I. The orbits of the planets are ellipses, with the Sun at one focus of the ellipse.

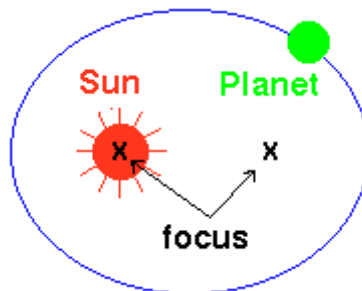


Fig 34 Kepler's first law

Kepler's First Law is illustrated in the image shown above. The Sun is not at the center of the ellipse, but is instead at one focus (generally there is nothing at the other focus of the ellipse). The planet then follows the ellipse in its orbit, which means that the Earth-Sun distance is constantly changing as the planet goes around its orbit. For purpose of illustration we have shown the orbit as rather eccentric; remember that the actual orbits are much less eccentric than this.

Kepler's Second Law as shown in Fig35 II. The line joining the planet to the Sun sweeps out equal areas in equal times as the planet travels around the ellipse.

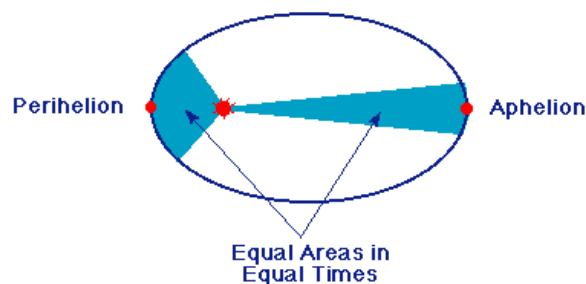


Fig 35 Kepler's second law

Kepler's second law is illustrated in the preceding figure. The line joining the Sun and planet sweeps out equal areas in equal times, so the planet moves faster when it is nearer the Sun. Thus, a planet executes elliptical motion with constantly changing angular speed as it moves about its orbit. The point of nearest approach of the planet to the Sun is termed *perihelion*; the point of greatest separation is termed *aphelion*. Hence, by Kepler's second law, the planet moves fastest when it is near perihelion and slowest when it is near aphelion. Since energized gravitons input energy (F.E.) is fluctuating as the orbit set by thoughts are elliptical therefore other two thoughts are also triggered when planet reaches at perihelion and triggering stimulus is rapid change in interaction (high-energized gravitons in high-density area + high momentum of planet at perihelion which is due to high velocity) . This time thought stimulation is conditioned.

2.3.What is Kepler.s Lawlessness.

Planets (M2) making of elliptical path around sun (M1) is the law made by mind (unconditioned thought expression) While the Kepler's lawlessness is without orbiting first pulsar (M1) , the second pulsar (M2) does make elliptical path (unconditioned thought expression) and vice versa . There is no center mass (red plus sign) around which both are orbiting .

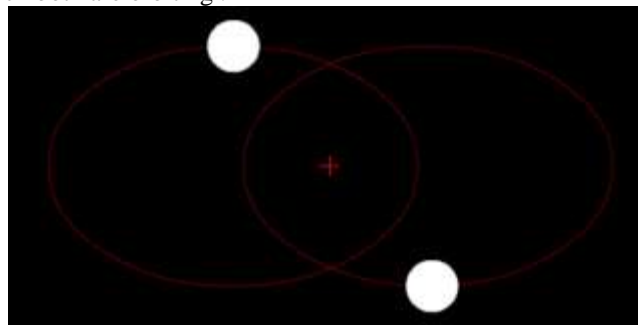


Fig 36 Two bodies with similar mass orbiting in an ellipse around a common barycenter. Center is without mass.

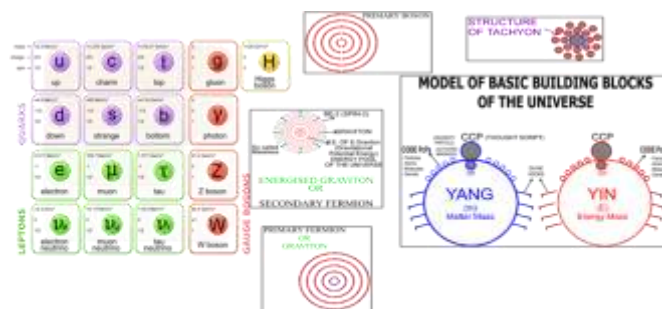
. In gravity interactions , it is the M2 that decides

1. How many EG s (M1) would interact with M2 .
2. How much energy would be taken for work done for rotational velocity is decided by M2.
3. What effect (Rotational Velocity magnitude) plus the type of effect (moving in orbit) would be triggered is also decided by M2 .

EGs (M1) only move with velocity of light and they give energy to the system and become low energized gravitons (EGs) The directional effects (changing directional effects) some times are decided by M1. [3] . The density (Number of EGs /unit area) of EGs of pulsar (near pulsar) at perihelion increases and then decreases at aphelion as the distance increases . Therefore pulsar coming each other have high rotational velocity rather than when they are away. Here they obey 2nd kepler's law .

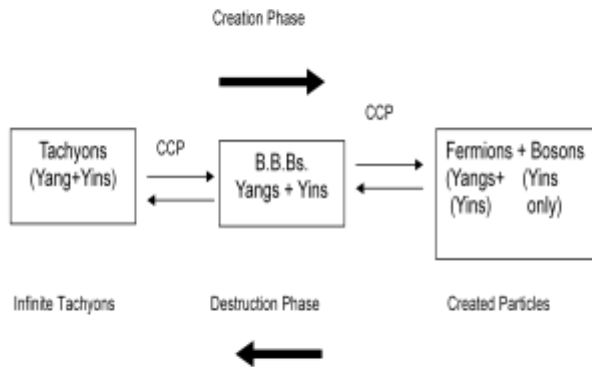
2.4.How to detect Energized Gravitons(EGs)

Earth is liberating energized gravitons and these energized gravitons are more dense near the surface and density reduces as distance from the surface increases as shown in Fig 38. Thus detecting density of EGs /unit area confirming their existence . Hence EGs have been placed in Standard Model. The standard model not only modified rather it has been completed [16] with introduction of energized gravitons , primary fermions , primary bosons , Basic Building Blocks , Mind and Tachyons as shown in as shown in Fig 37 .



Standard model completed with Fundamental particles and Mind And Tachyons

Fig. 37 standard Model chart [16]



Standard Model during each creation of the universe keeps on shifting from Tachyons to created fermions and bosons and during destruction it keeps on shifting from created particles to Tachyons. Only B.B.Bs (two) are eternal and immortal. Simultaneously information's do not die. Hence B.B.Bs are Omnipresent and Omniscience. Omnipresent is defined as God. Hence B.B.Bs are God particles (Mind and mass).

Fig 37.1 one creation and destruction cycle

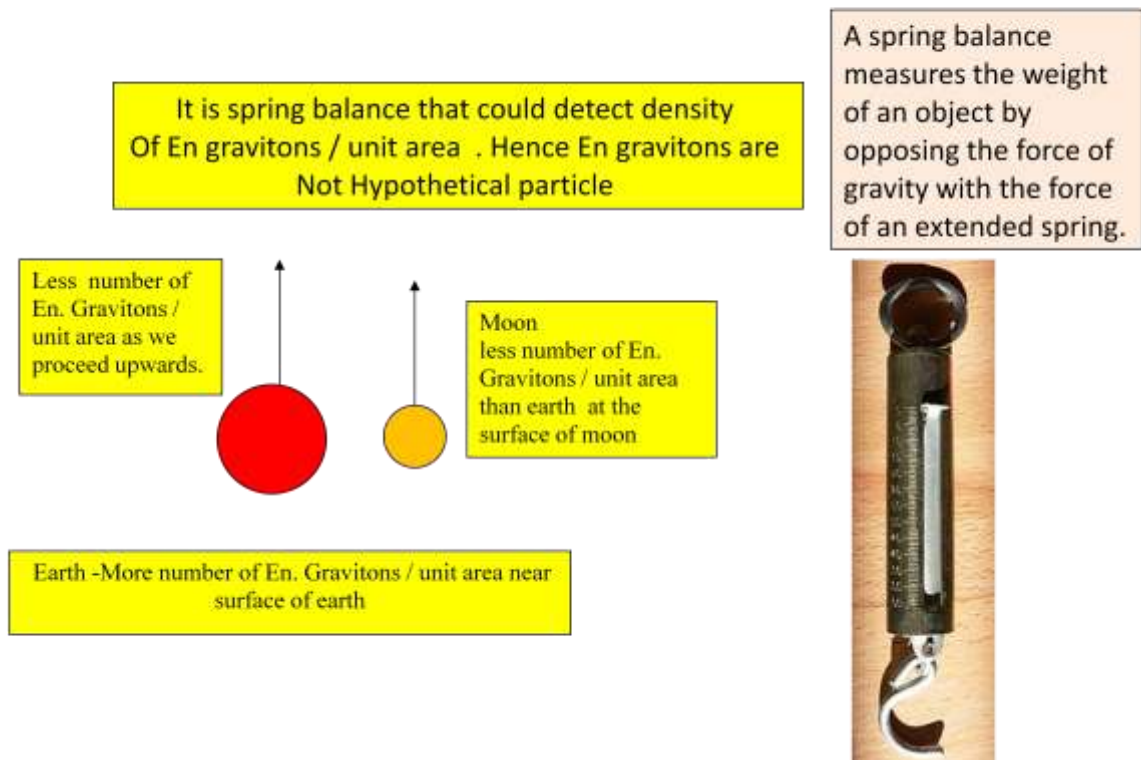


Fig 38 A spring balance measures the weight of an object by opposing the force of gravity with the force of an extended spring. Thus detecting density of EGs /unit area confirming their existence .



Fig 39 As can be seen from this map, gravitational wave detection is truly a world-wide Endeavour. No candidate hitherto has detected Gravitational Waves .

2.5 What is divine MOND ?

Gravity According to Participatory Science

1. Earth is liberating energized gravitons and these energized gravitons are more dense near the surface and density reduces as distance from the surface increases. as shown in Fig 40

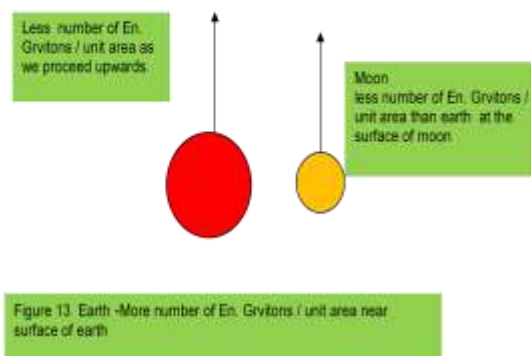


Fig 40 Earth is liberating energized gravitons and these energized gravitons are more dense near the surface and density reduces as distance from the surface increases

2. Density of energized gravitons at the surface is proportional to the mass of the planet.

In this equation it is the number of interacting energized gravitons / unit area are more concerned rather than the mass of body. So, for correct result , one must take number of interact energized gravitons/unit area into consideration rather than mass of planet. Since we cannot calculate number of interacting energized gravitons per unit area therefore we take indirect measure i.e. mass of the planet thus wrong results are recorded. For example: - In case of pin and 10 kg. Weight .. The density of magnetons per unit area liberated by magnet is more than the density of interacting energized gravitons per unit area by earth , therefore pin is pulled up. In case of 10 kg. weight density of magnetons liberated by magnet is less than density of interacting Energized gravitons, therefore 10 kg. Weight remains there. There is difference in density of energized gravitons at the surface of earth and density of interacting energized gravitons in the object .

3. Density of energized gravitons at the surface is proportional to mass of planet. Density of interacting energized gravitons is proportional to inertial mass of interacting object. It is decided by MIND of the object (M2) that how much energized gravitons would interact with the outer interacting surfaces of interacting body (M2) to give the desired effect . It is all fed thoughts and feeding was done in pre creation era by the Highest center of the universe .

4. Modern physicists believe that since value of mass changes with velocity hence value of G is not constant . According to participatory science force of attraction of any mass depends upon the energized gravitons concentration released by body. When this body moves or changes its velocity, the energy mass (boson) is added in the system hence the increased mass is energy mass (concept of motion discussed). Therefore its energized gravitons (secondary fermions) concentration and its release is unaffected. Whatever be the velocity of object, force exerted by the unit masses placed at unit distance will remain same. Therefore value of G is constant. (Bosons and fermions are not inter convertible).

5. Interaction of energized gravitons with different units (photon, electron, quark, proton, neutron, nucleus of the atom, apple, matter of different densities, planets, satellites, suns, and receding galaxies of the universe.) depends upon the fed programming (Fed thoughts) done during pre creation era by highest center of the universe.

2.6 Periastron shift, the rotation of the elliptical orbit that the pulsar

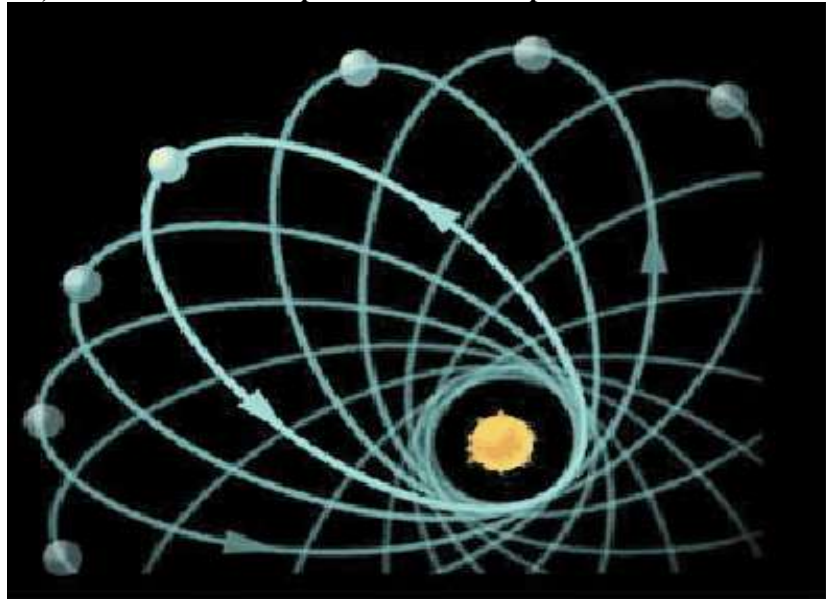


Fig 40.1 Precession of the perihelion of Mercury – There is expenditure of high energy in shifting and rotating of planet mercury . It is Divine Mechanics that design precession.

Here the deviations from Newton's gravitational physics are large. As an example may be mentioned that the periastron shift, the rotation of the elliptical orbit that the pulsar (according to Kepler's first law from the beginning of the 17th century) follows in this system, is 4 degrees per year. The corresponding relativistic shift for the most favourable example in our solar system, the above-mentioned perihelion motion of Mercury, is 43 seconds of arc per century (this is less than a tenth of the very much larger contributions to the perihelion motion caused by perturbations from other planets, chiefly Venus and Jupiter). The difference in size between the shifts is partly due to the orbital speed in the binary pulsar, which is almost five times greater than Mercury's, and partly due to the pulsar performing about 250 times more orbits a year than Mercury. The orbiting time of the binary pulsar is less than eight hours, which can be compared with the one month our moon takes to orbit the earth.

The mechanics of periastron shift, the rotation of the elliptical orbit that of pulsar is divine mechanics rather than general relativity .

2.7 What is General Relativity ? It is Myth and Illusion

Gravity Spectrum [17]

Gravity's spectrum

The frequency of gravitational waves depends on the sources they originate from. Detectors focus on different regions of this spectrum of frequencies. Today the BICEP2 project reported the first clear detection of waves from the birth of the universe

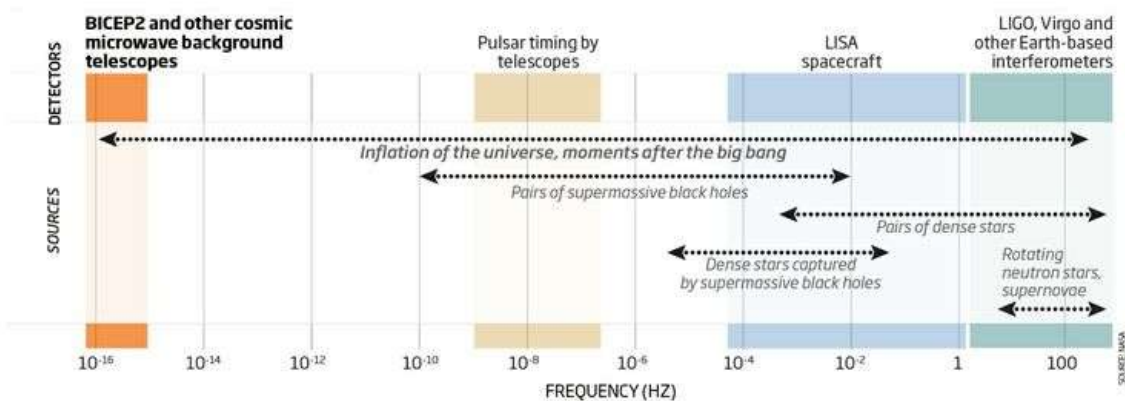


Fig 41 This is not gravity spectrum that reveal gravitational waves by variation in CMB from the birth of universe

Somewhat counter-intuitively, general relativity asserts that gravity is *not* a force. Instead, it is the result of objects travelling the shortest possible distance between any two points in a curved geometry. This is not the three-dimensional geometry of space, but that of four-dimensional space-time (i.e. one time plus three space dimensions).

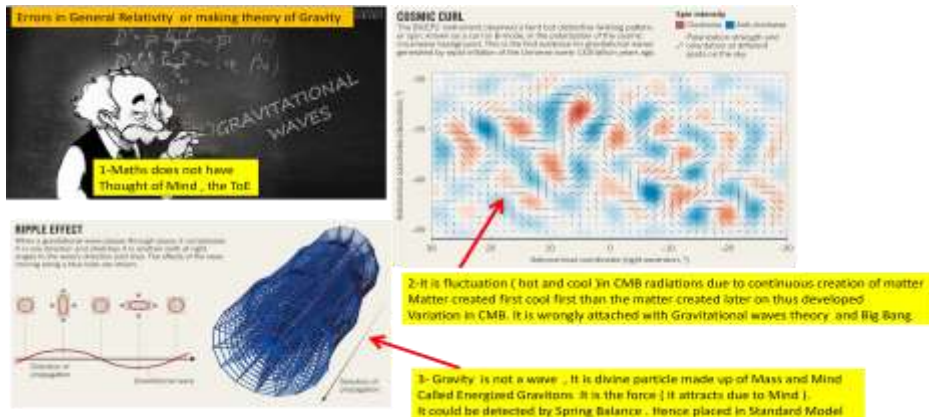


Fig 42 Errors in Theory of General Relativity

Telescope captures view of gravitational waves . Inferences are wrong as it is not related with Big Bang [18]

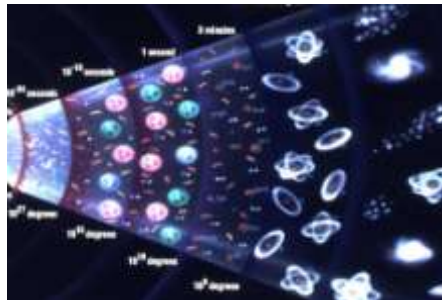


Fig 43 Big bang model of origin of the universe

Astronomers have peered back to nearly the dawn of time and found what seems to be the long-sought ‘smoking gun’ for the theory that the Universe underwent a spurt of wrenching, exponential growth called inflation during the first tiny fraction of a second of its existence. Using a radio telescope at the South Pole, the US-led team has detected the first evidence of primordial gravitational waves, ripples in space that inflation generated 13.8 billion years ago when the Universe first started to expand. The telescope captured a snapshot of the waves as they continued to ripple through the Universe some 380,000 years later, when stars had not yet formed and matter was still scattered across space as a broth of plasma. The image was seen in the cosmic microwave background (CMB), the glow that radiated from that white-hot plasma and that over billions of years of cosmic expansion has cooled to microwave energies. The fact that inflation, a quantum phenomenon, produced gravitational waves demonstrates that gravity has a quantum nature just like the other known fundamental forces of nature, experts say. Moreover, it provides a window into interactions much more energetic than are accessible in any laboratory experiment. In addition, the way that the team confirmed inflation is itself of major significance: it is the most direct evidence yet that gravitational waves — a key but elusive prediction of Albert Einstein’s general theory of relativity — exist.-

2.8 What Does A LIGO Site Do ? Experiment on Earth would remain Negative as The Gravitational waves reaching earth are incredibly faint [19]



Gravitational waves reaching Earth are incredibly faint. It takes two to distinguish gravitational waves from a more local disturbance like an earthquake, which would look vastly different at each site.

Gravitational waves HIT both sites equally, unlike an earthquake.

The Livingston Parish LIGO site covers a swath of about three square miles through farmland between Denham Springs and Hammond.

HOW IT WORKS

- 1 THE LASER**
A single high-powered laser is optically split in two and sent down long vacuum tubes.
- 2 THE TUBES**
Two identical tubes, each 2.5 miles long and completely free of air molecules, are built at right angles to each other. In the vacuum created in the tubes, a laser stays in a light beam.
- 3 THE MIRRORS**
Mirrors of fused silica are positioned on each end of the tubes. Laser light directed inside bounces back and forth, retracing its own path millions of times until both tubes are pulsating pipelines of light. These tubes become like identical vibrating guitar strings, playing the same note.
- 4 THE DETECTOR**
When a gravitational wave strikes LIGO, it will compress or expand the four mirrors. When the mirrors change shape even a tiny bit, the vibrating light inside the tubes won't play the same note, and the tubes will "spill" some of their light. A special detector will pick up that spilled light, and recombine the two beams into one. When that happens, the detector puts out a wave form that is a cosmic snapshot from space.
- 5 THE DEADEND**
The detector, reacting to gravitational waves from colliding stars, would generate a specific wave signal. By studying the shape and size, scientists can detect cosmic events.

IMPROVEMENTS TO THE TWO LABORATORIES, dubbed Advanced LIGO, when combined with data from similar observatories in India, Italy, Germany, Australia and Japan, should increase the area of the universe from which gravitational waves will be observed.

ADVANCED LIGO RANGE
INITIAL LIGO RANGE
650 million light years
PART OF UNIVERSE

Sources: California Institute of Technology; LIGO staff research. DAN SWENSON / GRAPHICS REPORTER

The Gravitational waves reaching earth are incredibly faint

This motion of test masses suggests an obvious method for detection – [Michelson interferometry](#). The nuts and bolts of interferometry involve splitting a single laser beam in two, each travelling at right angles to the other. Each beam travels a certain distance, hits a mirror and returns to the original point at which they split, recombining to form a single beam once more. If no gravitational wave is present, each beam will travel the same distance, and the combined beam will have a certain [interference pattern](#) caused by the recombination of the light. But when a gravitational wave passes through the system, the relative length of each arm will oscillate back and forth, and the resultant interference pattern will **display this motion**. Sounds easy ...

It is myth and illusion as earth mass is below a critical value such that EGs have no interaction with photons on earth (shown by straight sun light shafts coming from clouds on sunny days) but it has interaction near massive body with EGs (as density of EGs/unit area is high or mass of stars are above critical value) as bending and radar test causing slow down of speed of photon. But it is mind of M2 that decides when to interact (on massive body) with EGs and when not to interact (on earth).

III. Conclusion .

Kepler's first law states that the orbits of the planets are ellipses, with the Sun at one focus of the ellipse. But in binary pulsars orbiting violates this law as there is no focus of the both ellipse. Still they obey kepler's second law that states that The line joining the Sun and planet sweeps out equal areas in equal times, so the planet moves faster when it is nearer the Sun. Thus, a planet executes elliptical motion with constantly changing angular speed as it moves about its orbit. The point of nearest approach of the planet to the Sun is termed *perihelion*; the point of greatest separation is termed *aphelion*. Hence, by Kepler's second law, the planet moves fastest when it is near perihelion and slowest when it is near aphelion.

Pulsars do follow the second law and hence their rotational velocity is changing with change of density of EGs /unit area . First pulsar reaching in high density area possess high rotational velocity than in low density area and vice versa . Since energized gravitons input energy (F.E.) is fluctuating as the orbit set by thoughts are elliptical therefore other two thoughts are also triggered when pulsar reaches at perihelion and triggering stimulus is rapid change in interaction (high-energized gravitons in high-density area) . This time thought stimulation is conditioned or Kepler's second law is due to conditioned thought stimulation which is due to changing density of EGs/unit area .On 2 July 1974 the first signals were discovered from binary pulsar, two neutron stars that orbit each other , it turned out that they could be used to demonstrate the existence of gravitational radiation. It seems Einstein was right. [1] . Einstein did not talk about particle theory of gravity rather he told that it is property of space time by bending of starlight near massive body and by radar test. These waves are not as predicted by Einstein . Einstein did not talk about divine mechanics (mind) of gravity interactions . Gravity waves are nothing but moving energized gravitons in wave pattern with velocity of light as photons are moving with velocity of light . . It is the spring balance that could detect density (number of EGs / unit area) of energized gravitons , hence they are not hypothetical particles. Two neutron stars that orbit each other is confirmation of Divine MOND (Divine modified Newtonian Dynamics) rather than this binary system of pulsars allowed for a study of the behavior of gravitation between them, which greatly advanced physicists' understanding of the general theory of relativity developed by Albert Einstein. Specifically, these systems seem to indicate a loss of energy which is consistent with the gravity waves predicted by Einstein's theory , the possibility of verifying with great precision the theory's prediction that the system should lose energy by emitting gravitational waves in about the same way that a system of moving electrical charges emits electromagnetic . This prediction is wrong as system loose energy only when Mind triggers the emission . Emitting of EGs (DM) from system is not loss of energy (DE) rather it is decay of quarks which is triggered by mind . And the loss of energy (DE) (due to decay of EGs) is from of energy pool of the universe (primary bosons) inside EGs (DM) which has been transformed into rotational velocities of two pulsars and other energies of pulsars like generation of magnetic field (photons), electric current (photons) and radio pulsations (Photons) all are generated by DE or decay of energized gravitons (energy pool of universe). Even spinning of pulsar receives energy from DE or decay energized gravitons (energy pool of universe) . It is the thought of spinning that decides the rotation rate (numerical mindness) and spinning phenomenon . Hence rapid rotation and slow rotation all are triggered by thoughts (numerical mindness) . Einstein's theory of general relativity is not only wrong theory as regard space time expansion from singularity rather it is broken pillar of Big bang theory also.

Reference

- [1] http://www.nobelprize.org/nobel_prizes/physics/laureates/1993/illpres/index.html
- [2] <https://theconversation.com/rippling-space-time-how-to-catch-einsteins-gravitational-waves-7058>
- [3] V M Das International Journal of Sciences: Basic and Applied Research **Volume 17, No 1** p 259-291 (2014)
- [4] <http://www2.astro.psu.edu/users/cpalma/astro10/class14.html> --5
- [5] http://en.wikipedia.org/wiki/Binary_star [30 June 2014 at 23:52.]
- [6] http://en.wikipedia.org/wiki/Binary_star
- [7] http://en.wikipedia.org/wiki/Physics_beyond_the_Standard_Model [21 July 2014 at 11:04.]
- [8] V M Das Social and basic sciences and research review **Volume 2, Issue 4** p 197-255 (2014)
- [9] Dr. Barbara Mattson:http://imagine.gsfc.nasa.gov/docs/science/known_12/pulsars.html [07-Feb-2011 09:13:32 EST]
- [10] <http://www.nrao.edu/pr/2006/radiomagnetar/> [Wednesday, August 23, 2006]
- [11] HyperPhysics <http://www.atnf.csiro.au/outreach/education/everyone/pulsars/index.html>
- [12] <http://hyperphysics.phy-astr.gsu.edu/hbase/astro/pulsar.html#c2>
- [13] Dr. Barbara Mattson http://imagine.gsfc.nasa.gov/docs/science/known_11/pulsars.html [03-Feb-2010 15:33:22 EST]
- [14] Dr. Barbara Mattson:http://imagine.gsfc.nasa.gov/docs/science/known_12/pulsars.html [07-Feb-2011 09:13:32 EST]
- [15] http://www.esa.int/Our_Activities/Space_Science/Old_pulsars_still_have_new_tricks_to_teach_us
- [16] V M Das International Journal of Sciences: Basic and Applied Research **Volume 17, No 1** p 292-324(2014)
- [17] <https://www.pinterest.com/pin/155444624612996479>
- [18] <http://www.nature.com/news/telescope-captures-view-of-gravitational-waves-1.14876>
- [19] http://www.nola.com/environment/index.ssf/2013/05/ligo_captures_gravitational_wa.html