

## **1-TITLE:** Mechanism of Gravity

### **2-BACKGROUND ART:**

Gravity is the most common experience in the world and there are enough evidences to prove that the natural phenomenon could have been understood and used by some brilliant civilizations lived in the past.

For the current age of civilization, **Sir Isaac Newton (1643-1727)** is recognized as the founder of Gravity and his theorization upon '**Acceleration of Gravity**', as the best measure of field strength of Gravitation, stands unchallengeable even today, passing a long duration over triple centuries.

It indicates that he has explicitly struck upon the reality of the phenomenon and his practical analysis upon evaluation of the '**Gravitational Constant**' is remarkably admirable.

Even though the physical behavior of the phenomenon was so clearly defined, the '**Mechanism behind Gravity**' was not explained by Newton and hence, the Scientists so ever born in the medieval period have made vigorous attempts to describe 'What is Gravity'.

'**Quantum Mechanics**' and '**Special Relativity**' suggest some '**Energy**' based origin for Gravitation while '**General Relativity**' of **Albert Einstein** declares '**Curvature of Space Time**' as the root cause for Gravity.

However as it seems, the subject field of Gravity has become much complicated by today with lots of mathematical equations, computations and bewildering definitions. It is very unfortunate of a thing from the students corner that, the ever accumulated huge **unfiltered subject content** of the syllabus has certainly gone beyond healthy carrying capacity of a human brain.

There are no practical proofs to conclude any of the theorizations and the long standing '**Stagnancy in Uncertainty**' is not good at all for Dignity and Reliability of 'Physics' and even laymen of the field starts shouting today that, 'Gravity is not found'.

### **3-THE NEW ENTRANCE:**

The new revolutionary concept of Gravity, going to introduce herein is entirely based upon the acceptance that, "Gravity is born due to a **Frequency Modulated (FM)** wave of high frequency, transmitted through the space medium". The inner atomic rotary dynamics and equilibrium of **Coulomb's** electrostatic forces between charged particles is addressed herein to define the origin of Gravity.

'Atom' is observed in a different angle in the new concept, and it is considered as a '**Vibrating Machine**' owing to its internal rotary dynamics of charged particles. A bigger collection of atoms therefore causes a stronger vibration to emit a stronger FM wave of energy, spreading spherically out from the **Gravity Source**.

Any secondary object of atomic mass, within the field, is induced with an '**Attraction**' towards the 'Gravity Source' by the eccentricity occurred at the nucleus, due to the frequent attack from the '**Gravitational Wave**'. The inner atomic dynamic stability of **Coulomb's electrostatic forces** is lost by the wave strokes and a resultant force is induced towards the direction where the wave attacks from.

#### **4-DESCRIPTION:**

##### **1. What is the difference of Gravity from Electricity and Magnetism?**

Mechanism behind Gravity is not so difficult to understand and Scientists of the 21<sup>st</sup> century could certainly bring the mystery in to a conclusion unless they really desirous of conserving the centuries late subject stock of manmade paradoxes.

A Physical Science Student of logical thinking and open mind should ask only three questions to strike upon the mystery of Gravity;

1. Why Gravity **attracts** only and why not **repel**?
2. Why Gravity attracts only objects of '**Atomic mass**' and why not other masses such as light, heat, photon, electron, neutron, solar wind, galactic wind and free space medium?
3. How Gravity could **pull** even far distant objects **without touching**?

Atomic mass is quite different from other masses because it possesses a system of internal rotary dynamics where a cloud of electrons rotate vigorously about the nucleus.

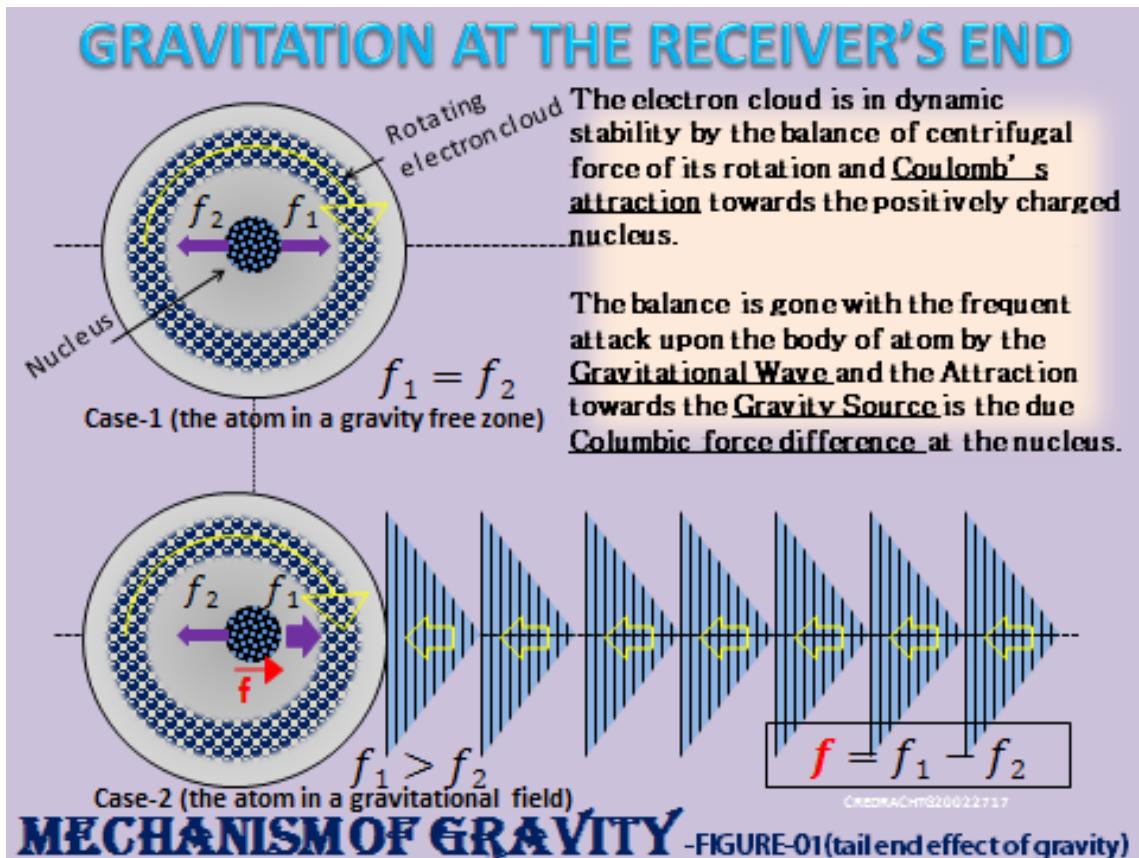
A single atom can be considered hence as a rotary machine in which electrons of negative charge are orbiting round the nucleus of positive charge. Mechanical Engineers would explain that every rotary machine is accountable to generate a continuous **vibration**.

Put a fly in to calm water and you would observe tiny waves spreading out round and round. That is how atomic masses produce **gravitational waves** through the space medium due to vibration. A bigger collection of atomic mass is therefore responsible to generate a stronger wave to emit, spherically spreading out from the **Gravity Source**.

That is how gravitational waves are born but how on earth it could attract distant objects?

When the waves strike upon any secondary atom in the field, the rotating electron cloud is a bit shifted closer to the nucleus from the direction at where the waves strike from. Thence the balance of **Coulomb's electrostatic forces** between negatively charged electron cloud and the positively charged nucleus is gone.

The force from the side of wave strike becomes higher because the distance to nucleus in that direction is decreased. The resultant unbalance force makes the atom move gradually towards the gravity source and Sir Isaac Newton (1643-1727) has explained rest of the phenomenon explicitly.



*Receiver's end mechanism of gravity is explained by the Figure-01.*

The difference of Gravity from Electricity and Magnetism is cleared herein such that '**Physical Attraction of Gravity**' is operated by means of a spherically spreading **FM wave** of high frequency.

## GRAVITATION AT THE PRODUCER'S END

Mechanical Engineers agree that every rotating machine makes a vibration and also, Atomic Chemists agree that Atom is a rotary system with an electron cloud orbiting the nucleus vigorously. Hence, a EM wave is emitted through the medium spreading spherically out due to the vibration of the Gravity Source (Atom).

A bigger collection of atoms therefore should emit a stronger wave through the medium. But what is the Medium for the Gravitational Wave?

It is the same Space Medium through which the other electro magnetic waves as TV and Radar are transmitted

### MECHANISM OF GRAVITY

-FIGURE-02 (emission of the gravitational wave)

*The producers end Gravitation is explained by the Figure-02*

Producer's end Mechanism of Gravitation addresses 'vibration of atomic matter' as a whole. If a single atom could be recognized as a tiniest scale of a **vibrating machine** owing to its inner **rotary dynamics**, then a bigger bulk mass of atoms should generate a stronger medium wave due to its cumulative vibration as a body.

The continuous vibration of atomic masses cannot be observed by Man for its high frequency ( $\approx 10^7$  cycles per second) but **static work done** by the vibration could be observed by simple evidences such as;

- Structural foundations of ancient civilizations are always discovered at abnormally deep depths in the ground. That is because of **self-vibration** of heavy structures to cause sinking down in to soil under wet climatic seasons.
- Even strong building structures are perhaps cracked and fallen fail within short period of time. That is because of **self-vibration** under unbalanced loading conditions upon footings.

- Water is springing out from high altitude mountains even during driest seasons. The phenomenon to be recognized as 'Natural Gravity Pump' and the work is done by **self-vibration** of a huge rock fragment rested upon a confined ground water aquifer. Natural non return valves could be formed by falling soil and rocky aggregates in to a crack hole in the rock, so that water is pumped out from the top. (please refer to 'theory of Mountain Fountain'-annex-02)

## **2. How Gravity could pull far distant objects?**

The FM wave of high frequency travels far in the space, though its strength is lost inversely proportional to square of the growing distance. The wave strokes attack upon the atomic bodies of the object to occur an **eccentricity** in the dynamic rotary system of the inner atomic charged particles. The unbalance of **Coulomb's electrostatic forces** causes a **resultant force** towards the direction where the wave comes from.

**Gravitational Force** induced upon any object is therefore directly proportional to the **number of atoms** in the object and also the **atomic weight** (or more precisely '**Mass**' of the object). It is not necessary to explain that inner atomic rotary dynamics is stronger in atoms of bigger atomic weight.

That is how **Sun**, the king of Gravity in the solar system, could possess the **orbital control** upon the planetary system and even upon far distant comets perhaps nearly beyond its gravitational territory.

## **3. Why Gravity cannot pull energy masses such as light, heat, electrons & 'Solar wind' etc.?**

It is a simplest observation for students to realize that, Gravity has no control at all, upon deciding the path of a lightening stroke in the sky.

Similarly gravity has no control on **solar wind**, **light rays** and **heat rays**. Otherwise Sun, the biggest holder of Gravity, should not have given any of the aforesaid resources out for us.

*Therefore it can be concluded that, Gravity is completely incapable of attracting of the **non-atomic masses** of which no inner **rotary dynamics** in function.*

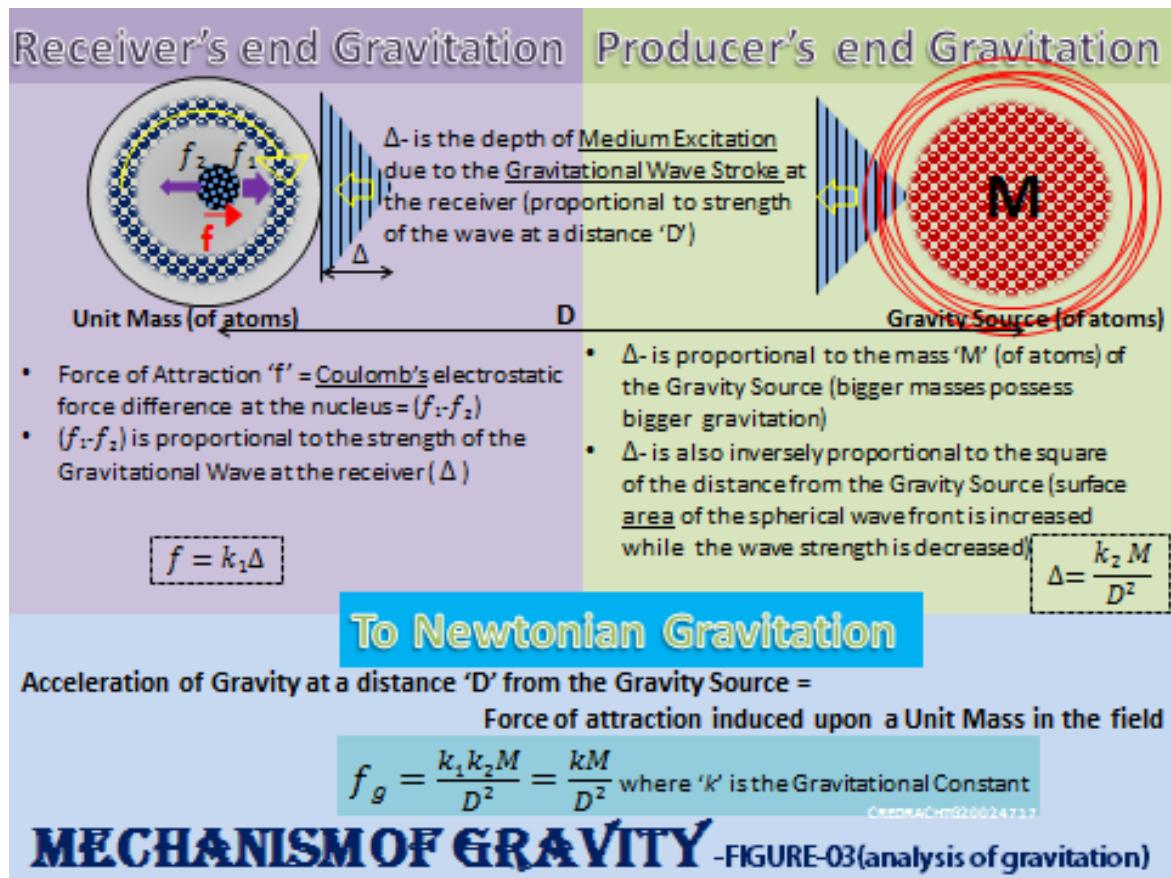
But there is the famous observation of light rays bending towards the huge gravity sources as stars. Yes, the observation is correct but the definition is erroneous there because it is not Gravity but mirage of **Refraction** that takes place due to space medium **pressure increment** at Suns. (*Please refer the analysis on space medium pressure variation within the solar system -annax-1*)

#### 4. Analysis to meet Newtonian Gravitation:

There are two ways scientifically accepted to prove a new theory such as;

- 1)-Practical experimentation and
- 2)-Mathematical derivation.

*(The thought practical experimentations to prove the gravitational wave require a great deal of money and therefore the mathematical way of deduction only is followed herein).*



*Mathematical deduction to prove the FM-wave basis of Gravitation-Figure-03*

It has been proved that the novel theory of '**FM-wave basis of Gravitation**' too is ultimately destined in the famous theory of '**Newtonian Gravitation**'.

It has also reviled that there was a stepfather for Gravity, **Charles-Augustin de Coulomb (1736-1806)**, even though he himself was not aware of his great contribution for future analysis in defining the **Mechanism behind Gravity**.

**END**

## **5-FURTHER ANALYSIS ON GRAVITATION:**

There are a few related technical papers also to be produced upon further analysis of Gravitation such as;

- Practical analysis of **Frequency** of the **Gravitational Wave** and introduction of '**Static work done**' by Gravity.
- Theory of '**Gravity Deviation**' when the Source is in **dynamic rotary behavior** and analysis of the '**Orbital Motive Force**' on planets and satellites.
- Phenomenon of '**Inverted Gravity**' in huge gravity sources and formation of **Hollow Globes**.
- Concept of '**Moola Gravity**-the gravitation in the **dropped scale** of matter (**Dark Matter**)' and analysis of the **interatomic bond** between non ionized atoms of elements.

## **6-AOUTHER'S EXCLAMATION:**

01.The captured subject content under this technical paper is not new and it was published at first in 2009 as '**Space Dynamics-V2**' in my personal website [www.cyrilhtgamage.com](http://www.cyrilhtgamage.com) under the column- 'Space Dynamics'. And also it was published in some famous websites such as; world mysteries.com and science doubts.com etc.

02. My efforts so ever made, for an official submission of this technical monograph to any of academic research departments of Physical Science, failed because I possessed no adequate qualifications on academic specialization (PhD) in the relevant subject fields.

03. But I have continued my **independent exploration** to define the **Fundamental Realities of Nature** and published the findings in my technical monograph-'Space Dynamics'-ended by 2016 in eleven volumes.