

Gravity is the Property of Energy

Keerthivasan Chandrasekaran

Abstract: *Pure Energy has a property of Gravity. All elementary Particles like quarks, Lepton, gluon, bosons, etc are transformed from energy through its property named Gravity.*

Universal law of Gravity states the Gravitational field of an object formula as below.

$$GM/R^2$$

The Einstein Formula states the energy and mass are another Dimension as below.

$$E=MC^2$$

By being both formulae, we can know the Gravity of energy. Below topics of Gravity is important for this theory.

Theory:

- 1) Property of Energy and Elementary and subatomic Partials
Formula:
- 2) Gravity of 1KG Mass Formula
- 3) Gravity of Pure Energy Formula
- 4) Quark creation by gravity of Pure energy formula.
- 5) Immediate rate of pure energy attraction or transformation
- 6) Attraction of two Level of Pure energies

1) Theory:

- a) Property of Energy and Elementary and subatomic Partials

- Property of Energy: Gravity
Pure Energy has a property called Gravity.
Pure energies are scattered in the universal with space among them. The Pure energy attracts each other by the property named Gravity.
After the energies are attracted by Gravity, it forms elementary Particles like Quarks, leptons, Gluon, Bosons, etc.,

- Property of Gluon: Strong Force
Quarks are attracted by strong force from gluon and Quarks forms neutrons and protons. Neutrons and protons are bound in nuclear by strong force of gluon. The strong force is the property of Gluon.
Property of Proton and Electron: Electromagnetic Force
Proton and electron attract each other by positive and negative electromagnetic forces. Both has a property of electromagnetic force.

- Property of W and Z Boson: Weak Force.
W and Z bosons in nuclear can cause atomic change by decay. W and Z bosons have weak force as a property.

- Property of Mass: Gravity
Atom or isotopes are formed by three forces and the gravity of energy.
Atoms form objects by molecular. The molecular are bound by electromagnetic force.

Energy of an object is the reason for it' gravity. Mass has Gravity then the energy has gravity because Energy is another dimension of mass.

Once the pure energy binds and creates new elementary Particles, it's Gravity will increase because of bonded and accumulated energy.

2) Formula:

- a) Gravity of 1KG Mass Formula
Gravitational Field= GM/r^2 , As per law of universal Gravity of newton.
Gravity of a kg Mass is inversely proportional to square of radius of distance from center of mass and directly proportional to G (Gravity Constant)
 $E=MC^2$ is the formula of Einstein.

If a kg mass is converted to Photon, then the speed is c so the kinetic energy is converting 0 speed to C speed or speed of light, so it requires Kinetic energy of C^2 . Velocity increased by C then Kinetic energy is doubled.

We can re - write:

We can put Einstein formula to Gravitational field to identify the gravity of energy for a KG Mass. $M=E/C^2$
 $g=GE/(C^2) * (r^2)$

The Gravitational Field of energy of 1KG Mass = $GE/(C^2) * (r^2)$

- b) Gravity of Pure Energy Formula
There is no mass so we can say it pure energy. Pure energy is measured in joule.

$M=E$ for pure energy. Pure energy does not have mass, so Mass is replaced by energy therefore Mass = Energy. $g=GM/r^2$

$$M=E$$

$$G = GE/r^2.$$

r is very minimal. We must measure microscopic level for pure energy. We can make it as 1 or below to it.

- c) Up Quarks creation by Pure energy formula.

Pure Energy's Gravity:

$$GE/r^2$$

$$\text{Up Quarks} = 4.117 \cdot 10^{-30} \text{ Kg}$$

$$\text{Energy} = 4.117 \cdot 10^{-30} \text{ Kg} \cdot C^2$$

Gravitational Field of UP Quarks.

$$G * (4.117 \cdot 10^{-30} \text{ Kg}) * C^2 / r^2$$

Gravitational Field of Pure Energy in UP Quarks:

GE/r^2 , r is very minimal and its microscopic level. Even we can make it as 1 or below to it.

$$E=M \text{ for pure energy}$$

$$E = 117 \cdot 10^{-30} \text{ Kg} \cdot C^2 \text{ for UP QUARKS.}$$

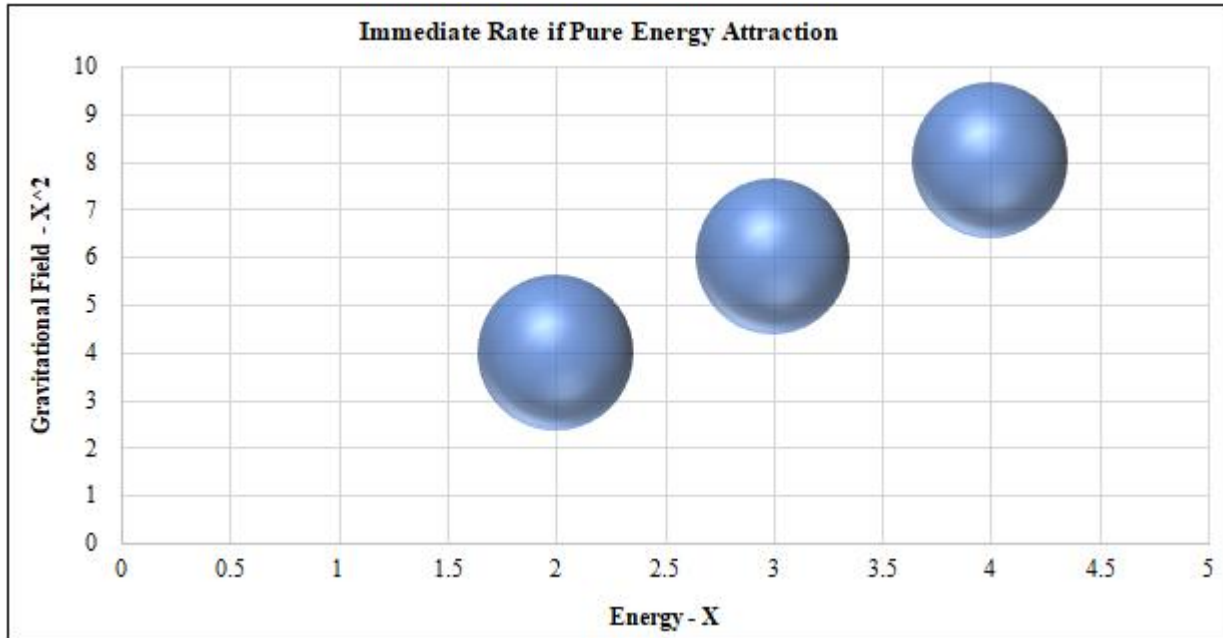
$117 \cdot 10^{-30} \text{ Kg} \cdot C^2$ times of Pure Energy is bound by Gravitational fields.

Volume 11 Issue 6, June 2022

www.ijsr.net

Licensed Under Creative Commons Attribution CC BY

3) Immediate rate of pure energy attraction or transformation:



$$\text{Gravitational Field} = EG/r^2$$

X axis is Energy

Y axis is Gravitational Field

We can assume as Energy is attracting indigenously around a radius by gravity. We can use the differentiation for immediate rate of change in attraction of energy by gravitational field.

$$\text{Immediate Gravity of Pure Energy} = d/dE (GE/r^2)$$

$$= G * d/de (e/r^2)$$

$$= G * 1 * - 2/r^3$$

$$= - 2G/r^3$$

$$\text{Immediate Gravity of Pure Energy} = - 2G/r^3$$

4) Attraction of two level of pure energies

$Gm_1 * m_2 / r^2$ is Gravity between two masses as per law of Gravity.

Replace the Mass by Energy for pure energy.

E1, E2 are attracting each other.

$$GE_1 * E_2 / r^2 = \text{Gravity between two level of energies.}$$

4. Conclusion

The Energy is having a property called gravity. The Gravity is the reason for energy transformation into elementary particles. The gravity within the energy attracts other energy and then it transforms into elementary particles. Energy is the source of Quantum Gravity.

References

- [1] Universal Law of Gravity
- [2] Special relativity theory
- [3] Various books – Short History of Neary everything, etc.,
- [4] Wikipedia