

# Theory of Everything

## Energy Levels

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*Abstracts*— — It is a journey of Newton, Einstein and many others thoughts that why did apple fall down and it started with defining it as gravity. But what is gravity a force of attraction, force that makes thing fall down not yet defined it properly.

There should be one law or one formula that governs all phenomena.

This theory not only defines gravity also describes all the phenomenon of the universe, it is the key for the phenomenon's of the universe.

*Keywords*—Fundamentals, Gravity, Force of interaction, Theory of Every Thing.

### 1. INTRODUCTION

The basic building blocks of universe is space and matter itself. We are going on finding the smallest particle that makes the whole universe but neglecting the space. Space and matter together they can make n-number of variables starting from unity to infinity, it's all depends on their arrangements.

As we know how to measure any unit by comparing its quantity with its standard, force, mass, energy, time and distance are all same but we are measuring them in terms of quantity by comparing.

Force of an object is not same in its rest position and in its motion as it interacts with the matter in space.

#### A. Arrangement of matters in space

1. Uniform
2. Increasing level
3. Decreasing level

Due to these arrangements of matters three different frames of reference are formed.

1. Rest
2. Acceleration
3. Deceleration

Comparing a body in these frames without applying external force.

1. In rest frame the body is at rest with its energy level.
2. In accelerated frame the body is accelerated towards its energy level and the rate of acceleration is depending on the field.

3. In deceleration frame the body is decelerating opposite to its energy level and the rate of deceleration is depending on the field.

#### B. Frame

It is not necessary that all frames are same for all bodies, it is depending on their energy level and motion. Motion towards the energy level is accelerating frame and motion opposite to energy level is deceleration frame. The same frame can act both accelerating and decelerating frames depending on their motion. At every point of frame of reference force experience is changing.

## 2. FUNDAMENTALS

### 1. Law of the universe: Equality

#### 2. Space

Something that is at very equilibrium state, cannot interact and absolute. No other state is in such an equilibrium state than empty, such an equilibrium state that cannot interact can perform only one thing that is equal ate and that's where the law of universe equality came from.

### 3. Law of Locality

Location of matters at a time cannot be the same.

### 4. Law of Energy conservation:

Energy neither be created nor be destroyed but it can be increased/accumulate or decreased/dissipate.

### 5. Cause of motion

An external force applied or difference of energy of an object and the force experience causing to move from its space.

### 6. Laws of motion

If an object is in motion remains in motion until it reaches its energy level or acted by side forces.

Force and displacement of an object in motion varies with frame of reference.

### 7. Force

Matter per unit space.

### 8. Force of Interaction

Force experienced is directly proportional to mass and inversely proportional to distance between them.

A unit force of interaction cannot be greater than force of a unit mass by itself.

### 9. Law of proportionality for steady state

Space and matter should be proportional to each other for steady state of the universe.

The matter concentrated at one place has to be distributed equally at the rest of the universe such that they there is no force of interaction. Else there is imbalance in the universe.

OR

The remaining matters to be settled down according to the force of interaction or Remaining matters to be settled down so that there should equal force at every surface.

According to law of proportionality of the space and matter every concentrated matter tries to form its own field to form steady state to overcome from imbalance.

Space cannot interact with matter because space is already in equilibrium it not in pieces. Remaining is matter and it has to interact with matters keeping space as steady state.

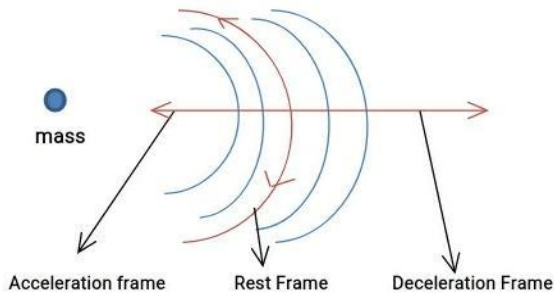


Fig.1, All frames for an outer object.

Position of an object.

Matters tells force of each object, energy difference tells position of each object.

### 3. EQUATIONS

#### A. Force Experience due to energy difference

Force can be described as the ratio of difference of energies and distance between them, the difference of energies makes bodies apart so that the two bodies' faces equal force between them.

The force that bodies experience

$$F = \frac{F_{max} - F_{min}}{d} \quad (1)$$

E – Energy

(It conclude that moon cannot fall on earth or earth cannot fall on sun because their energy difference and quantity.)

#### B. Force due to motion

Force due to motion can be described as multiple of speed and mass. The cause for motion is due to difference of forces. We know that difference in forces makes bodies apart.

The force that casing bodies apart

$$F = \frac{F_{max} - F_{min}}{d} \quad (2)$$

Total force that body exert

$$Ft = MF \quad (3)$$

M – Body mass

F – Force experienced

Difference of forces is equal to distance travelled.

$$F_{max} - F_{min} = d \quad (4)$$

C. Acceleration frame

We know that rate of change of position of an object is given by velocity

$$V = \frac{d}{t} \quad (5)$$

The force at every time interval is given by

$$F = mv \quad (6)$$

Total force after time interval t

$$F = mat \quad (7)$$

Or

Velocity at time interval t of an accelerating object

$$V = u + at \quad (8)$$

$$F = mat \quad (9)$$

(In acceleration frame this rate of change of velocity is known as acceleration)

(Space, time and energy has to be absolute for a standard measuring unit.)

(F = mv at every time interval for uniform motion as velocity remains same)

Comparing force due to energy difference and motion

Force experience at every interval = Force applied at every interval.

$$F = v \quad (10)$$

Force Experience at a distance:

Force experience is at a distance is directly proportional to mass of a body and inversely proportional to distance from that.

$$F = \frac{M}{d} \quad (11)$$

Total Force of the Falling Body

$$Fb = m \frac{M}{d} \quad (12)$$

#### 4. PHENOMENONS

##### A. Gravity

Gravity can be described as the force experienced by a particle or body at any point in space.

Gravity can be described as force distribution in empty space or energy of the system per unit space, which increase as we increase density of matters per unit space and vice versa. As we move towards the object body will experience increase in force as the result of increase in total energy of the system and decreases away from the object. Mass represent the force of that object at that space which decreases to the ratio  $M/d$  as we go away from that object.

These are the forces that another body can experience at a distance from that object.

Force from a unit mass

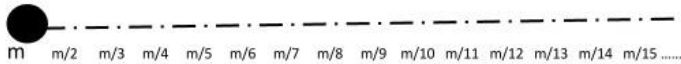


Fig.2, Distribution of force of mass 'm'.

The total energy of the system at every separation of two-unit mass

$$F = \frac{m1+m2}{d} \quad (13)$$

As the energy of the system increase force experience also increases and vice versa

A unit energy of the system cannot be increased greater than energy of a unit mass by them self. it requires an external force.

Why do bodies fall at a same rate?

The force experienced by a body varies with distance and field irrespective of mass of the falling body. Mass tells the total force of the falling body.

Reason: Force acting at unit space on unit mass from a distance is constant. Or the change in total energy of the system is same for all unit mass at a distance.

Force between two masses is depends on both fields

Light is wave or particle

Light is a combination of particles with negligible force between them. Light moves because small particles cannot stay together without an external force, as we discussed gravity is not an attractive force instead it is an equality force. When a matter with large mass broke into tiny particles, each particles experiences a large difference with their subordinates, because their quantity and concentration compared to a single particle as a result they spread in all possible directions.

As light is a very tiny particle with negligible mass it reflect when hit to high energy particles. Also as it spreads in all directions it obeys interference of light, refraction of light is depending up on speed of light in different mediums.

## B. Magnets

To understand magnets or behavior of matters, we have to know that matter is the only force that we have. Thus the maximum unit force that we have is force of a unit mass. Matters consists of space they are not overlapped matters cannot occupy same place at same time (Law of Locality).

Each unit matter has its own energy field of interaction where it can interact depending on distance or energy levels. When we increase the quantity of matters force of energy levels increased. Depending on the force of energy levels matters gets separated or closer.

It also applies to unit matters as force of interaction gets greater than force of unit mass they get separated so that they can experience equal force.

### Strength of Energy Levels

Force distribution of unit mass per unit space

However, force of a unit mass is very less for convenient take force of unit mass be 100

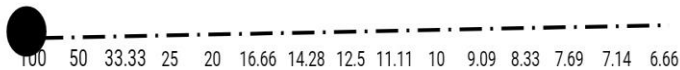


Fig.3, Force distribution by mass as 100 units

On accumulating number of mass force of energy levels increased. Depending on density and mass strength of energy levels differ.

Strength of energy levels can be changed by changing density.

Comparing a body experience a force at a distance on changing strength of field.

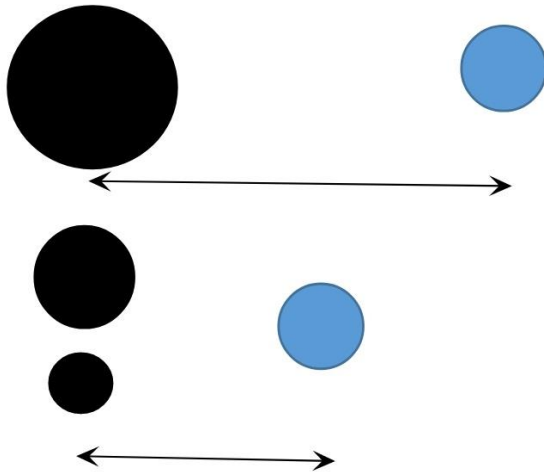


Fig.4, Representing position of a body according to force experienced.

By changing strength of the field we can change positions

Ex: Current flowing through a wire creates energy difference due to resistance of the wire

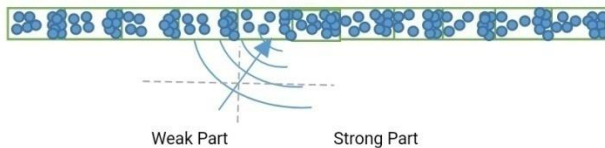


Fig.5, Representation of changing force experience according to mass distribution.

Energy difference orients axis of field as net field due to which strength of field is divided as strong part and weak part.

1. When two wires bring closer without flowing current through them they behave like normal matters and attract each other with least force.
2. When current flows in same direction in both wires they experience high force and gets separated so that unit energy of the system be less than energy of a unit mass.
3. When current flows in opposite direction the orientation of energy fields are in line with each other, reduction in strength of fields causes two wires to come closer.

## Magnets

Magnets are formed by applying strong potential/energy difference in both sides so that concentration of particles are varied due to resistance of the magnet. Highly concentrated particles distributes force as strong field and less concentrated particles distributes force as weak field.

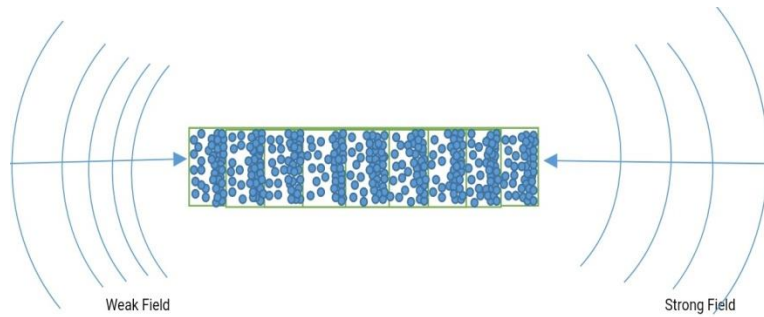


Fig.6, Representation of changing force experience according to mass distribution.

### Interaction of Magnets

1. When two strong fields get closer they experience repulsive force due their energy difference.
2. When two weak fields get closer they experience repulsive force due their energy difference.
3. When weak and strong fields get closer they experience attractive force due they never reach their energy levels.

### C. Axis of Interaction

Axis of interaction is a point where two energy levels meet with equal force. As strength of fields varies they vary with their force distributions so that distance of strength of energy level is different for different field.

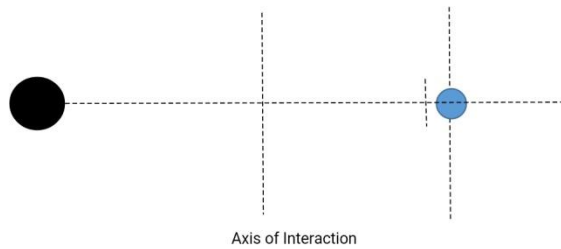


Fig.7, Showing position of axis of interaction according to

force experiece.

Every field interacts differently as their axis of interaction meats at different distances.

Energy difference is high when axis of interaction is at the centre away from weak field. Energy difference is minimum when axis of interaction is at the centre of one of the body.

The space that we live is three dimensional. Beauty of three dimensional space is the area of communication (surface area) increases widely as we go away from the centre. Possibilities of external force increases compared to internal force as a result energy is stored.

Possible Ex: volcano inside planet, surface of sun due to external force of planets, Molecules

### D. Attractive force

The force that opposes separation of particles from their energy level.



#### E. Repulsive force

The force that opposes masses to come toward form their energy level.

#### F. Metal formation

Heating different energy particles in a Furness allows to particles undergo decomposition. At the time of decomposition energies gets separated which helps low particles to get that positions.

#### G. Temperature

It is defined as the rate at which a high energy particle undergoes decompose when collide with low energy particles.

#### H. Decompose

It is defined as the phenomenon of separation of two similar or dissimilar energy particles when low energy particles with greater mass enters in between them.

#### I. Electricity

It can be described as flow of permissible energy throw a medium due to the difference of permissible energy levels, as more energy flows more will be the force.

The flow of energy is depending on energy difference and the medium in which energy is flowing.

$$I = \frac{V}{R} \quad (13)$$

I – Current/Force

V –Voltage/ Permissible energy difference

R- resistance of the medium/Resistance to the permissible energy

## J. Planet

As particles go on joining forming higher level particles the surface of the particles goes on increasing compare to inside space. Further joining of particles with higher energy with smaller size the total energy of outer surface goes on increasing compare to inside energy. As a result, the higher energy particles from outside moves lower energy particles inside from all directions, resulting particles inside undergo decomposition forming volcano.

## K. Sun/stars

Stars are formed by a heavy dense matter in large quantity surrounded by number of planets. Planets around the sun continuously changing their position periodically which changes energy levels of sun or the rate of composition and decomposition.

Dense matters with large quantity particles of sun don't allow planets come towards or go away from sun, because the energy difference and quantity

## L. Earth orbit:

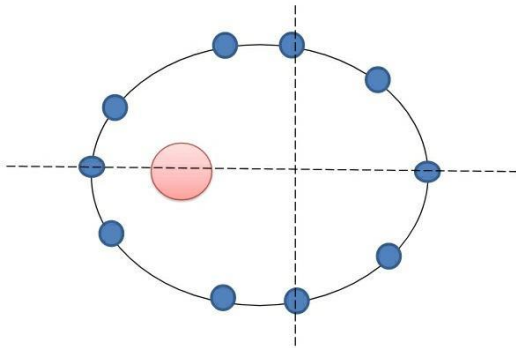


Fig.8, Earth orbit around the sun.

Why earth rotate in elliptical orbit

Reason is the energy difference and the force of rotation, the force of rotation is because of imbalance in the universe.

Difference of energy and quantity of sun and earth makes them apart and the force that causing rotation tries to take away earth from sun which forms an elliptical orbit.

SEASONS

There are mainly two reasons for seasons in all over the world, one is the distance between sun and earth and other is earth angle of rotation. (Also condition on earth)

As earth moves away from sun the rate of decomposition of particles increased whereas composition rate decreases and vice versa. Ex; light particle collides with water molecules gets easily vaporised when earth is away from sun.

The angles of rotation decide the amount light particles received over a time.

Why angle of rotation of earth is changing?

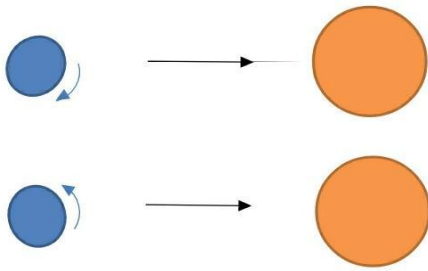


Fig.9, Showing earth centre of mass towards the sun sun and away from the sun.

The force of direction is directed towards centre of the mass, as earth moves away from sun centre of mass of earth moves forward and coming towards sun the centre of mass of earth gradually changes its direction toward sun.

The direction of centre of mass of earth and motion decides the motion of clouds.

## 5. SEASONS IN INDIA

### A. Summer

As earth moves away from sun decomposition rate increases, water molecules on earth get started evaporating due to heat of sun. Evaporated water molecules have a very less mass lesser than air molecules and moves up, settle with their energy levels.

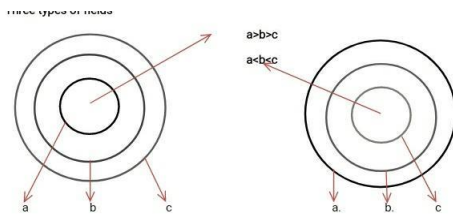
### B. Rainy

As earth moves towards sun the total energy of the field goes on increasing as a result tiny water molecules on the top gets energised by joining together. Because the field energy goes on increasing and the small molecules of water are unstable at that position. By joining large amount of water molecules forms larger molecules and drops to earth.

C. Winter

In this season earth is very close to sun. Decomposition rate is very less at this position.

6. Three types of fields:



$a > b > c > d$

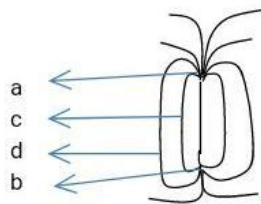


Fig.10, Type of force distributions.

Universe with variables:

There are no such things like dimensions, we use it for measurement purpose there are variable at every point of the universe.

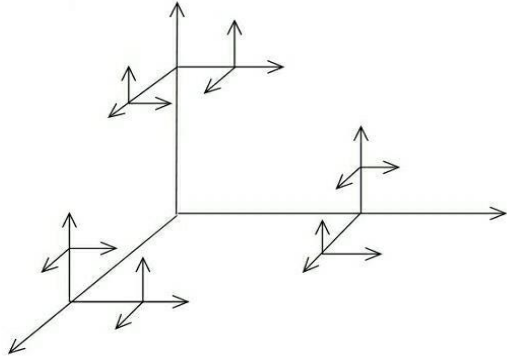


Fig.11, Showing force distribution at every point of the universe

### 7. Number of variables at every point

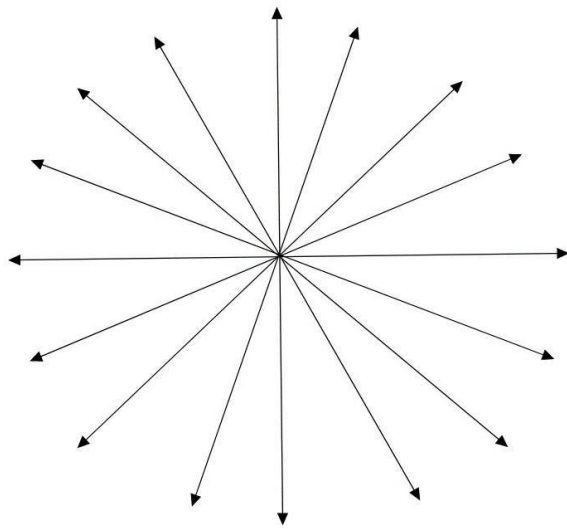


Fig.12, Number of variables at every point of the universe

### 8. CONCLUSION

It gives the basic understanding that how universe works in energy levels. Mechanical energy, electrical energy, nuclear energy, chemical energy, heat energy, wind energy all are same and follows the fundamentals, they vary with their interactions. Force of interaction vary with quantity of matter and space of interaction. More is matter more is force of interaction; more is space of interaction less is force of interaction. As a result, weaker is the gravitational force and stronger are electrical, nuclear and other forces.

Not all the matters attracted to each other, in such case all matters should form singularity. But we find space around the matters. It concludes that matters tries to stay with their energy levels because matter itself is the energy.

## 9. REFERENCES

[1] Newton's Laws of Motion.

[2] General Theory of Relativity

[3] Halliday & Resnick 'Fundamentals of Physics' (Book 10<sup>th</sup> edition)