

The Whole Theory of This Universe—A Step Forward to Einstein, Part-3rd: “The Universal Theory of Visible and Invisible Universe”

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Abstract

We believe that the universe is of two types: visible and invisible. Nothing is at rest between the invisible and visible universes. All microscopic bodies as well as all macroscopic bodies are in motion along curved paths (*i.e.* in circles). The universe inside an atom is as vast as the visible universe. An atom consists of millions of particles or particle galaxies which contain central energy pools or central energy cores. Energy pools present in the centre of the invisible universe inside atomic or subatomic particles from which particles and energy are continuously interconverting. In a dense central energy pool, two opposite charges are created due to the swirling motion of microscopic energy droplets. Small microscopic energy droplets may swirl either clockwise or anti-clockwise to produce microscopic tornadoes which are non-superimposable mirror images of each other and gain the property of positive and negative charges. Hence, the electrostatic force is originated between these two opposite charges, which are then changed into a pair of particles, *i.e.* catitron, which carries a positive charge, and anitron which carries a negative charge. All the other millions of subatomic particles or particle galaxies are produced in the same way. So, the electrostatic force is the basic force, and all other forces originate from this basic electrostatic force of attraction. When charged particles move, they produce an oscillating electric field, and the spinning of these particles produces oscillating magnetic fields. These oscillating electric and magnetic fields are perpendicular to each other and, by their interaction, an oscillating gravitational field is produced which is also perpendicular to both the oscillating electric field and the oscillating magnetic field. The Earth's axial tilt, which causes the Earth's precessional motion, is caused by the parallel alignment of the Earth's magnetic field with the magnetic field of the Sun. Gravity is not a cause of space-time curvature, but gravity causes space-time curvature. Space-time curvature is nothing but a curved path around a heavy object.

The Universal Theory of Visible and Invisible Universe—The Whole Theory of This Universe—A Step Forward to Einstein, opens new windows in the challenging fields of science and research, *i.e.* visible and invisible universe, universe inside an atom, what is the stuff of the entire universe? What will happen at the end of this whole universe?

Keywords

Oscillating Gravitational Field, Electrostatic Force, Swirling Motion, Microscopic Energy Droplets, Catitron, Anitron

1. Introduction

In the article by Voytsehovich in 2013, the theory of electromagnetic field motion stated that particles differ from their antiparticles only by the direction of rotation of the magnetic field. Leonid also explained that the annihilation process of electron-positron is by the fact that all fields become fully zero provided particles with opposite magnetic moments are superposed [1] [2]. In his 2018 study of Gravitational-magnetic-electric field interaction, Zhu discovered that gravity can be changed to a measurable extent by varying the strength of the magnetic field [3] [4].

James *et al.* in 2020 investigated that a strong columbic field can be used to create a pair of electrons and positrons. They also investigated that such types of columbic fields can be generated by using lasers of ultra-high intensity in a vacuum due to micro-bubble implosions [5] [6] [7]. Giné *et al.*, in their research in the field of modelling inertia through the interaction with quantum fluctuations, investigated that mass loses its status as a primary quality, becoming the result of elementary massless particles interacting with the Higgs field [8] [9] [10] [11] [12].

Cosmologists calculated the evolution of the universe over the past 13.8 billion years using two ideas that explain how matter is clustered in galaxies and Einstein's theory of gravity, or general relativity, which scientists have been using to calculate the extent of the universe's expansion at any time [13]. We may be able to take the next step toward a new theory that can explain the existing conundrums [14]. The total energy density of the Cosmic Microwave Background (CMB) is currently estimated to be within 10% of the unit. Additionally, the estimates of M of mass, light, X-ray emissions, and numbers and movements of clusters of galaxies that converge around 0.2 to 0.3 indicate a significant contribution through an energy vacuum, sufficient to produce the accelerated universe [15]. The movement of the Sun with the restoration of the spectrum to an extragalactic nebula has sought a correlation between clear radial velocities and distances, but so far the results have not been convincing [16].

We live in a world accelerated with either a positive constant cosmology or some other dark energy with a strongly negative pressure [17]. The acceleration

of the universe's expansion was used to argue for dark energy, but it was never directly measured. When we verify the data, this interpretation is based on the difference between the magnitude of the observed and the calculated size of a particular redshift. But there are a lot of uncertain relationships [18]. The unexpected fainting of the high-redshift type Ia Supernova (SNe Ia), as measured by two teams, has been interpreted as evidence that the expansion of the universe is accelerating [15]. We offer a new numerical method for building models of neutron black hole binary systems [19].

Smolin pointed out that the challenge of quantum gravity is how to integrate our knowledge of space and time from relativity theory with quantum theory. If we succeed in doing this, we will find a single, all-encompassing theory of physics that describes all phenomena, from the tiniest scales to the entire cosmos [20] [21].

The novel theory “The Whole Theory of This Universe—A Step Forward to Einstein, Part-3rd: The Universal Theory of Visible and Invisible Universe”, opens new windows in the challenging fields of science and research, *i.e.* visible and invisible universe, universe inside an atom, interconversion of matter and energy from microscopic bodies to macroscopic bodies levels. How electrostatic force generates? How electric field, magnetic field, and gravitational fields are produced and are interlinked? What is the stuff of the entire universe? What will happen at the end of this whole universe?

2. Universe and Its Types

When we say universe, it means the whole universe, whether it is observable or not, which is beyond the scope of observations, either due to our limited knowledge or due to the unavailability of instruments that are required to observe all types of heavenly bodies (visible and invisible) around us.

We believe that the universe is of two types:

- Visible universe.
- Invisible universe.
- **Visible Universe**

The universe that can or can't be observable with the naked eye or by using telescopes like Hubble or James Webb etc. constitutes the visible universe.

- **Invisible Universe**

An invisible universe is one that is present inside an atom that can or can't be observable with the help of a modern microscope, like an electron microscope.

Remember that telescopes are used to observe the visible universe while microscopes are used to observe the invisible universe. There is a great distance between microscopic bodies (subatomic particles) and macroscopic bodies (such as moons, planets, stars, the solar system, galaxies, clusters, super clusters, and so on) (**Figure 1**).

Nothing is at rest between the invisible and visible universes. All microscopic bodies as well as all macroscopic bodies are in motion in circles (curved paths).

They are also continuously converting into energy, and energy is continuously converting into microscopic bodies and macroscopic bodies in the visible universe as well as in the invisible universe. The shape of the invisible universe is similar to that of the visible universe, *i.e.* microscopic bodies are similar to those of planets, stars, galaxies, and clusters etc. and all follow the same universal laws. The same principle and theory apply to microscopic and macroscopic bodies. *It is the ratio between mass and distance which divides the whole universe into visible and invisible universes for human beings, and that ratio is controlled by gravitational force, which exists everywhere from microscopic sub-atomic particles to macroscopic galaxies, clusters, etc.*

Human beings are monsters for microscopic organisms as our feet do not crush the microorganisms, and we are invisible to them. Probably, human beings are microorganisms for those creatures whose feet do not crush them. That means their feet will probably be bigger than galaxies and clusters. That's why they are not visible to us (Figure 2).

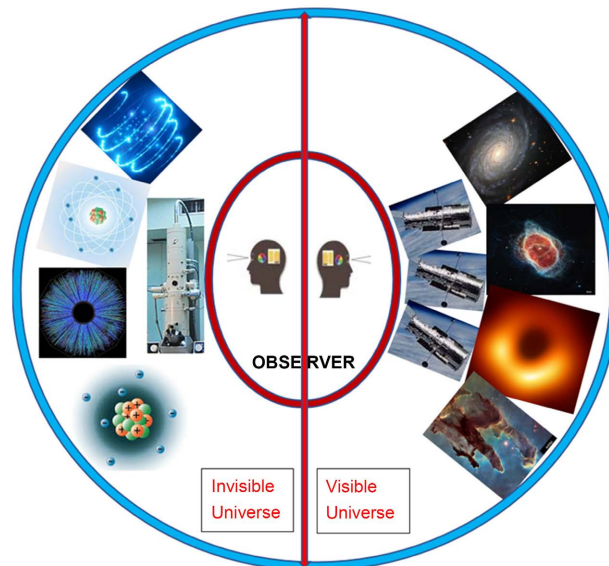


Figure 1. Concept map of invisible and visible universe.



Figure 2. Concept map: a creature walking on galaxies universe [22].

3. Universe inside an Atom

Universe inside an atom is as vast as the visible universe. An atom consists of millions of particles or particle galaxies, which contain central energy pools. Here, particles are continually converting into energy and vice versa. Energy pools are present in the center of an atom or subatomic particle from which particle and energy are continuously interconverting. Energy pools inside atomic and subatomic particles can be classified as:

1) White Holes: Which are not fully saturated with particles, *i.e.* they are Energy Deficient, reservoirs of Central Energy Pools (ED-CEPs) which are capable of entrapping the particles or particle galaxies of used energy inside them to convert them into energy.

2) Black Holes: They are Energy Rich, reservoirs of Central Energy Pools (ER-CEPs) which are capable of converting energy into the particles or particle galaxies (**Figure 3**) [23].

Similarly, in the visible universe, white holes are present in which old galaxies, stars, planets, or even clusters or super clusters (of used energy) could fall (depending upon the size of the white hole). Here matter is converting into energy. While, from black holes, new galaxies, stars, planets, and so on burn, here energy is converting into matter.

Actually, this universe (invisible as well as visible) is made up of the following three components:

- Energy.
- Force.
- Matter.

Force has the key role in converting energy into matter and vice versa.

4. How Force Is Created?

Microscopic Swirling Energy Droplets

Most probably, in a dense central energy pool, two opposite charges are created due to the swirling motion of microscopic energy droplets. Small microscopic energy droplets may swirl in either a clockwise or anti-clockwise direction to produce microscopic tornadoes, which are non-superimposable mirror images of each other (**Figure 4**) and gain the property of positive and negative charges (that is why only two types of charges exist) and change into a pair of particles, *i.e.* catitron, which carries a positive charge, and an anitron, which carries a negative charge (**Figure 5**) [23]. And hence, the electrostatic force of attraction comes into existence.

“This also suggests that charged particles should spin in opposite directions”.

All the other millions of subatomic particles or particle galaxies are produced in the same way (**Figure 6**) [23]. The mass of subatomic particles or particle galaxies depends upon the amount or size of swirling energy droplets, and they may carry either a positive or negative charge, depending upon whether they

are produced from clockwise swirling or anti-clockwise swirling of energy droplets. When particles are produced in the form of pairs of particles which are non-superimposable mirror images of each other (enantiomers), then neutral particles or neutral particle galaxies are produced (Figures 7(a)-(f)) [23]. It seems to be that neutral particle galaxies are produced in the form of pairs of particles which should be mirror images of each other, *i.e.* they should possess all the same properties except charges as.

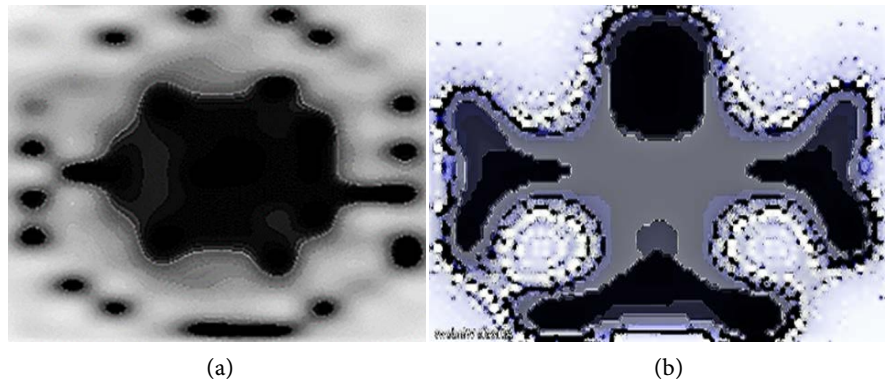


Figure 3. (a) Black hole (ER-CEP); (b) White hole(ED-CEP).

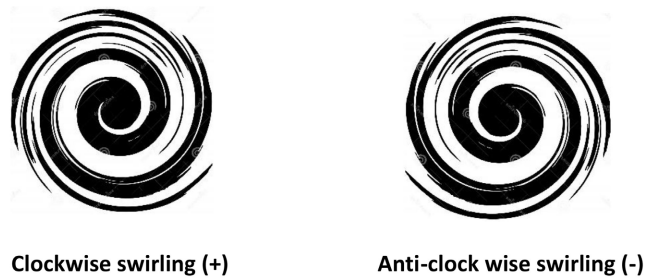


Figure 4. Concept map of microscopic swirling energy droplets.

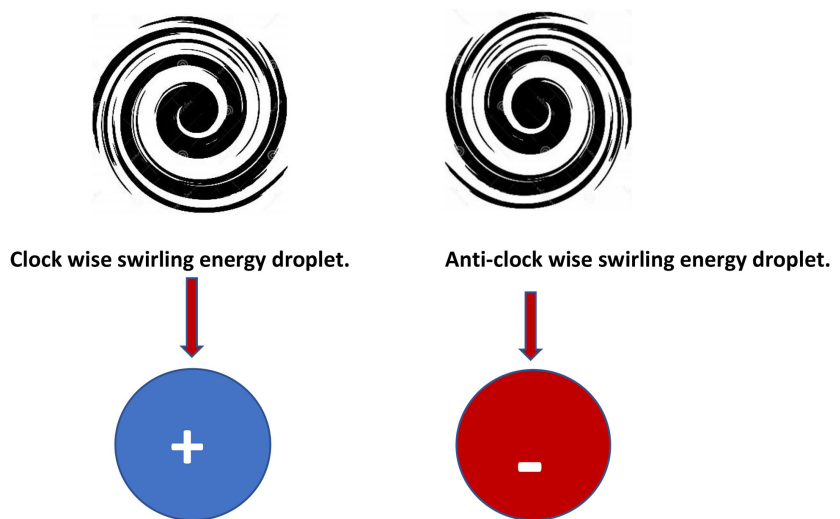


Figure 5. Concept map when clock wise swirling energy droplet changes into cation while anti-clock wise swirling energy droplet changes into anion.

5. Energy

Energy is a form of matter that is massless. Souls are made up of energy. That is why they are massless. They were present even before the creation of this universe and will be present after the destruction of this whole universe because after the death of this universe, everything will be present in the form of energy. Energy has the ability to do work, but matter does nothing. Energy is stored inside every material object. If energy is removed or transferred from it, then the matter will be dead matter, which will disintegrate like a human body when the soul is removed from it. It will disintegrate into compounds and elements. Similarly, when energy stored in the form of an energy pool inside every sub-atomic particle is utilized by it, it becomes dead and disintegrates back into energy.

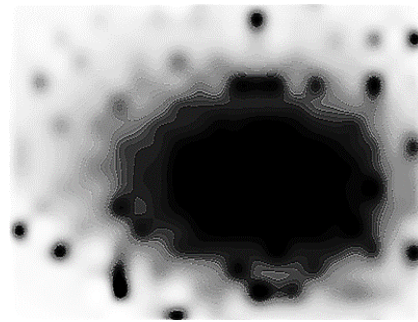
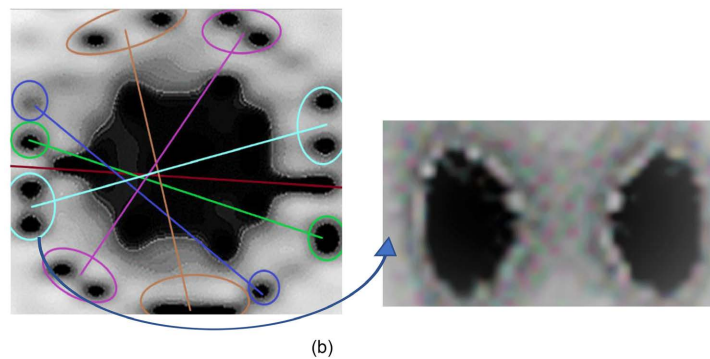
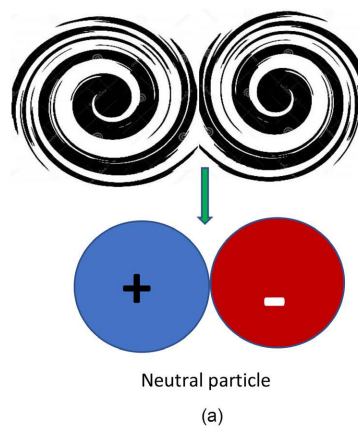


Figure 6. Swirling energy droplets which appears to be that they are changing into particles.



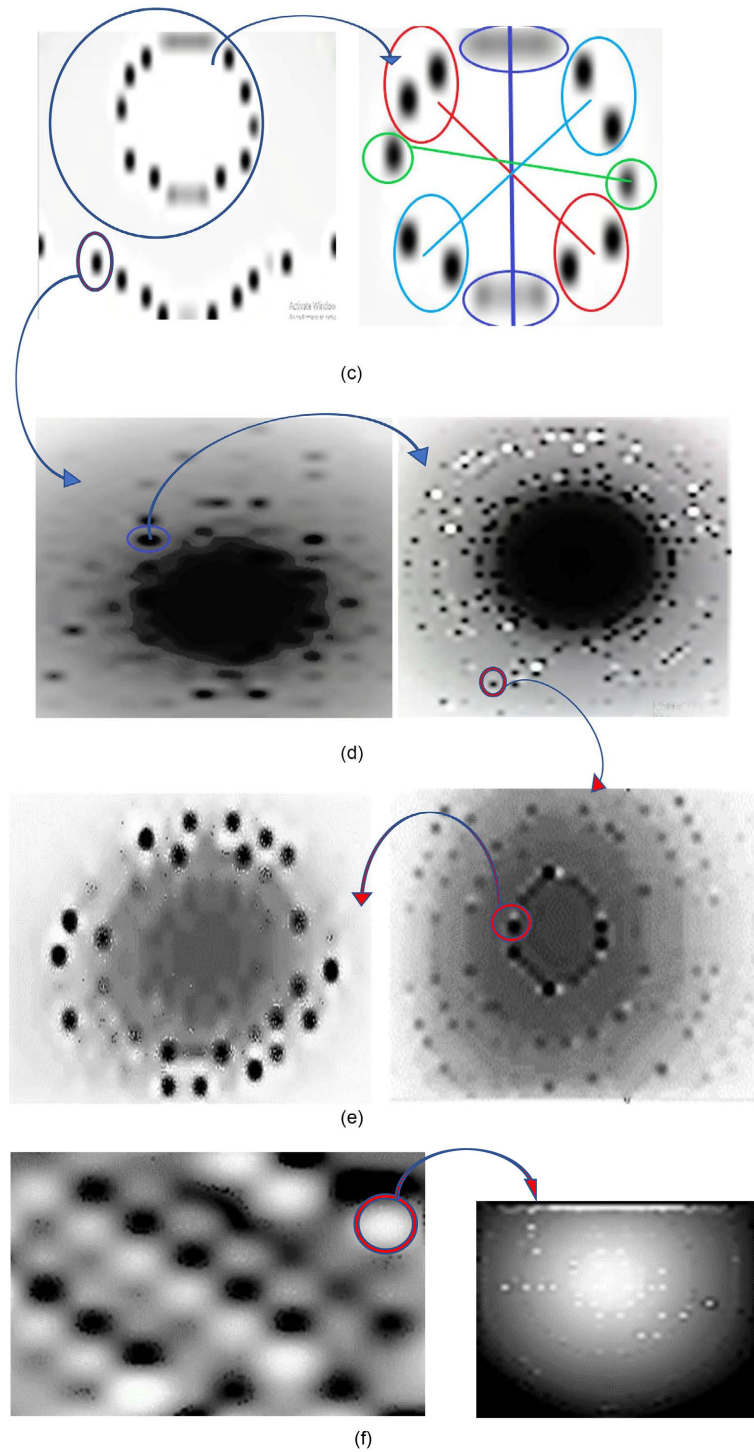


Figure 7. (a) Concept map of swirling energy droplets changing into pair of particles; (b) Neutral particle galaxy which produces pair of particles which are non-superimposable mirror images of each other (enantiomers); (c) Neutral particle galaxy which produces pair of particles which are non-superimposable mirror images of each other; (d) Every particle consists of galaxy of particles inside it with central energy pool; (e) Charged particles or particle galaxies which produce particles which are not non-superimposable mirror images of each other; (f) Luminous matter or particle galaxy.

There is a dynamic equilibrium present between energy and matter, which is controlled by force. When energy is converted into matter in one part of the universe, then the same amount of matter is converted into energy in the other part of this universe (both in the visible as well as in the invisible universe) (Figure 8).

The end of this whole universe will probably happen when opposite charges will not be created from the central energy pool, which is responsible for the creation of electrostatic force and which in turn is responsible for the production of a pair of particles (anitron and catitron). At that time, all matter will change into energy. All types of physical structures of matter (mountains, oceans, moons, planets, stars, galaxies, and clusters etc.) will be destroyed. That will probably be the end of this whole universe. This might happen when central energy pools begin to continuously expand. Then energy in these pools will become less and less dense, which will entrap particles to overcome their energy deficiency. As a result, particles will change into energy continuously, *i.e.* only the reverse process will occur, the forward process will be stopped (Figure 9).

At the end of this universe, all the matter will change into energy probably due to expansion in central energy pools. Charges will not be created due to less dense energy. So, there will be no chance for force to originate. At that time, all matter will be present in the form of energy, which is shapeless. Perhaps, this will be the period for the creation of a new universe, which will probably be governed by new rules and laws. So, we can expect that everything was present in the form of energy before this universe came into existence and at the end of this universe, all the matter will also change back into energy *i.e.* **“stuff of this whole universe is energy”**.

6. Unification Force Theory

So, there is only one type of force that originates between two opposite charges. That force is the electrostatic force of attraction. All other forces (which are present between atoms, ions, molecules, moons, planets, stars, solar systems, galaxies, clusters, etc.) originate from this basic force. As nothing is at rest in the invisible and visible universe, so, revolutionary motion of charged particles creates an oscillating electric field while rotational or spin motion or spinning of particles creates an oscillating magnetic field. A gravitational field or gravity or gravitational force arises due to the interaction of both oscillating electric and oscillating magnetic fields, which originate in microscopic bodies and operate up to macroscopic bodies in this whole universe. So, micro gravitational fields are generated at atomic and subatomic particle levels. The collective response of these micro gravitational fields creates a gravitational field which is responsible for gravity and for gravitational force. From a more saturated central energy pool, a greater number of charges will be produced. Stronger electrostatic forces will be generated, which will result in the production of a greater number of anitron and catitron. So, positive, negative, and neutral subatomic particles will be produced in greater numbers, which will be responsible for stronger gravitational forces and higher gravity. The gravity of the moon, for example, is smaller than the grav-

ity of the Earth, which is smaller than the gravity of the Sun, which is smaller than the gravity of the solar system, which is smaller than the gravity of galaxies, which is lower than the gravity of clusters and black holes, and so on (Figure 10).

The Gravity of Moon < The Gravity of Earth < The Gravity of Sun < The Gravity of Solar System < The Gravity of Galaxies < The Gravity of Clusters < The Gravity of Black Holes

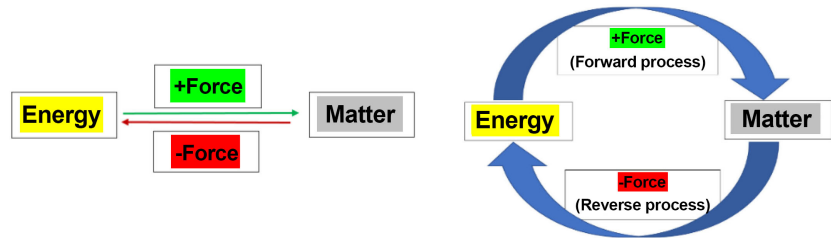


Figure 8. Concept map of interconversion of energy and matter.



Figure 9. Concept map of conversion of matter into energy at the end of this whole universe.

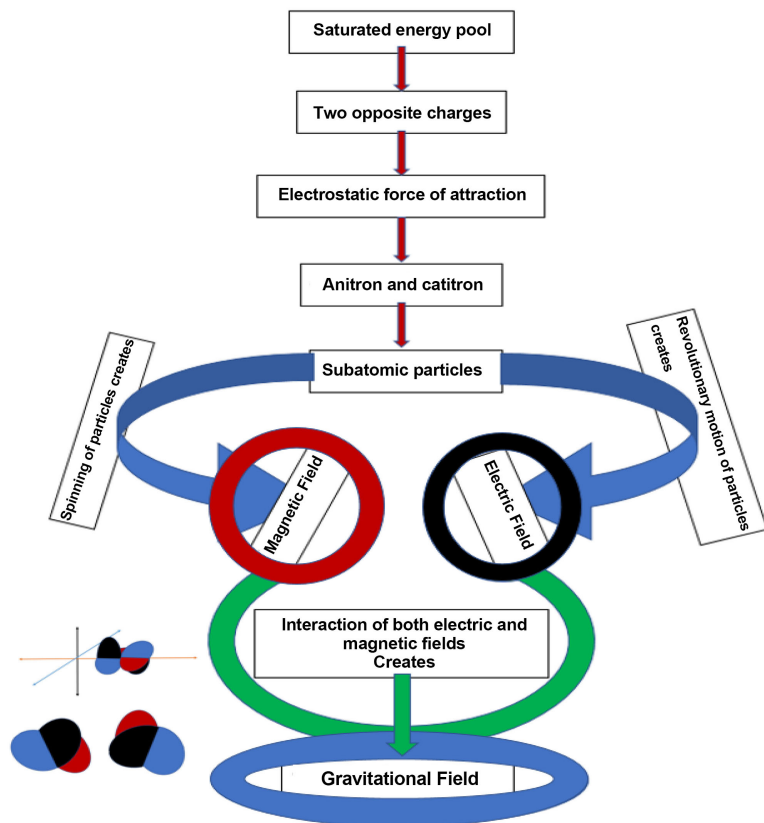


Figure 10. Concept map of unification force theory.

7. Gravity Is Not a Space-Time Curvature, But Space-Time Curvature Is due to Gravity

Space-time curvature is nothing but a curved path around a heavy object. Nothing moves in a straight line—all microscopic bodies as well as macroscopic bodies move in curved paths due to gravitational field or gravity. Every object moves in a curved path due to gravity.

Space is not one-dimensional. It is three-dimensional and gravity is symmetrically present around a microscopic body as well as around a macroscopic body. The three dimensions of a moving object are always changing their directions with respect to their surroundings or frame of reference, but the dimensions of the moving object remain the same.

All microscopic bodies as well as all macroscopic bodies move around each other due to three oscillating fields, *i.e.* when charged particles move they produce an oscillating electric field, and the spinning of these particles produces oscillating magnetic fields. These oscillating electric and magnetic fields are perpendicular to each other and, by their interaction, an oscillating gravitational field is produced, which is also perpendicular to both the oscillating electric field and the oscillating magnetic field. When two objects move with respect to each other, their electric and magnetic fields are parallel to each other while their gravitational fields linearly approach each other. All microscopic oscillating electric, magnetic, and gravitational fields give their response in the form of macroscopic bodies, like planets revolve around the Sun on the same principle (**Figure 11**).

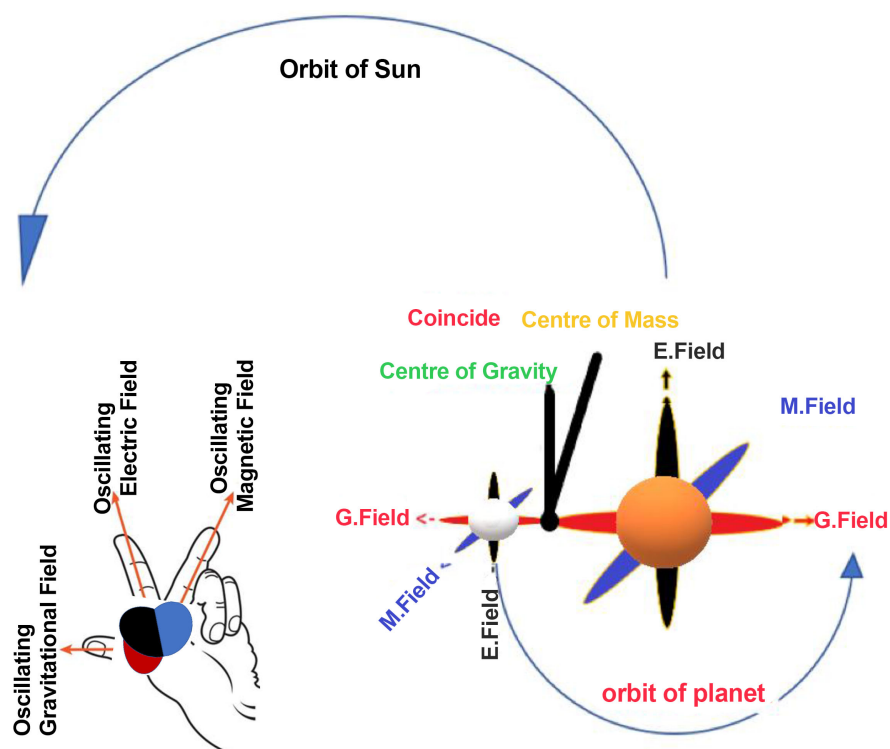


Figure 11. Concept map of oscillating electric, magnetic and gravitational fields of Sun and planet.

8. Two Moving Objects Which Move Due to Gravity Possess Three Types of Motions

Two moving objects which move due to gravity possess three types of motions with respect to each other:

1) Revolutionary Motion

It is orbital motion.

2) Spinning or Rotational Motion

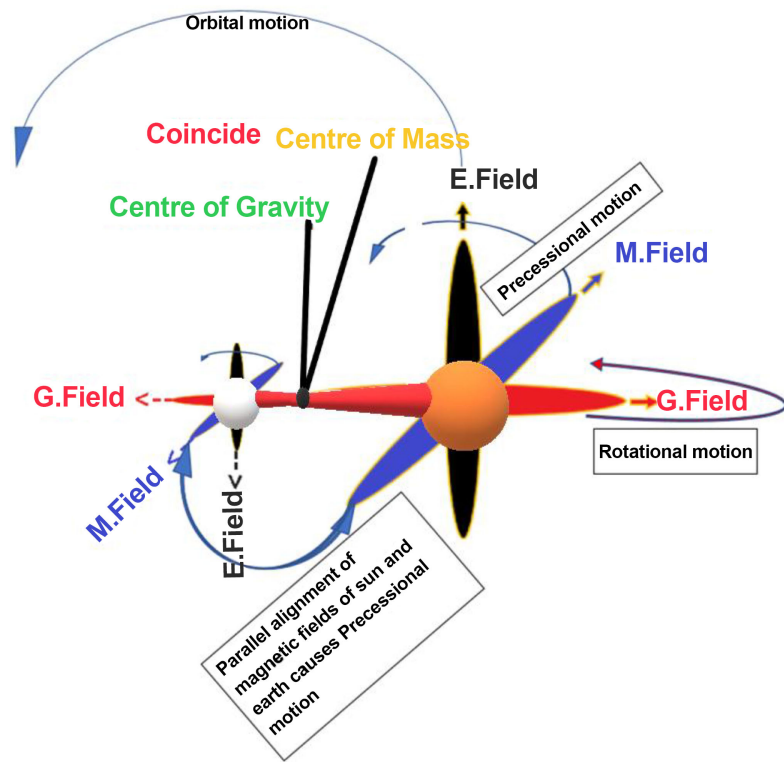
It is the rotational motion of an object about its own axis.

3) Precessional Motion

When an object spins it also precess around its rotational axis.

Axial Tilt of the Earth

The axial tilt of the Earth, which causes precessional motion of the Earth, is due to the parallel alignment of the Earth's magnetic field with the magnetic field of the Sun. Hence, linear alignment of gravitational fields of the Earth and Sun causes rotational motion, while parallel alignment of magnetic fields of the Earth and Sun causes precessional motion, which produces precessional loops in orbital motion (Figure 12(b)) [15]. And parallel alignments of the Earth's and Sun's electric fields cause orbital motion (Figure 12(a)). Remember, all three fields, electric, magnetic, and gravitational, are oscillating fields because all objects are in motion due to the inherent property of clockwise and anti-clockwise swirling energy droplets. All microscopic as well as macroscopic objects move on the same principle.



(a)

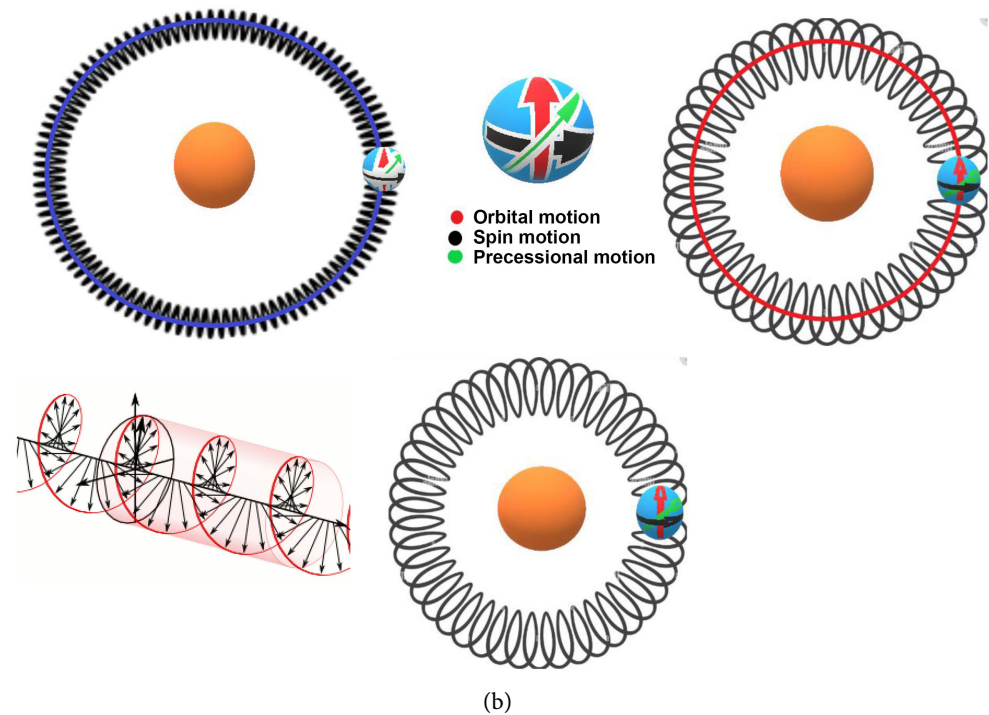


Figure 12. (a) Concept map of alignment of three fields and the motion caused by them; (b) Concept map of precessional loops and direction of motions [24].

9. Relationship between Distance and Time of Events

Time: Time is not an independent quantity. It depends upon the distance. The time difference between two points increases with distance. For example, the time difference between two points separated by 1000 km will be smaller than the time difference between two points separated by 10,000 km. Similarly, if the same event is happening at two points at the same moment, it will be observed by two observers at different time intervals if they are not equidistant from the two points, or if one observer is at rest and the other is moving with some speed. So, it is the distance that decides the time of an event, and it is not the time that decides the value of the distance. The second thing is speed; the speed of the observer as well as the speed of the event or waves that are produced as a result of the event, because both may increase or decrease the distance of the observer from the point of event. As the speed increases, the distance from one point increases with a corresponding decrease in distance from the other point. In that way, a slow-moving observer and a fast-moving observer will observe the same event at different time intervals. For example, if two remote-controlled bombs of the same strength blast at two points A and B with one click, which produces sound waves of exactly the same intensity and same wave length, then the observer C will observe only one sound while observer D will observe two sounds. So, two observers will have two different observations depending upon their distances from the points of events, although both events will happen at the same moment (Figure 13).

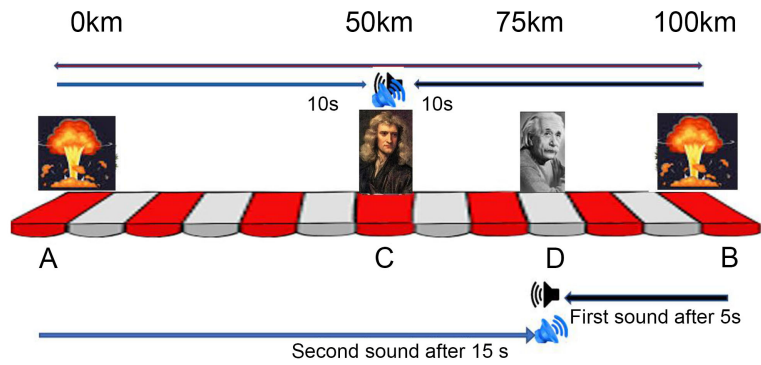


Figure 13. Concept map of relationship between distance and time of events.

10. Universal Law

The gravitational force acting on coincided centres is directly proportional to the distance of separation of two moving objects when their centres of mass and gravity coincide with each other.

OR

The gravitational force acting on coincided centres between two moving objects (motion due to gravity) is strongest at a distance at which their centres of mass and gravity coincide with each other.

OR

The distance of separation between two moving objects (motion due to gravity) is fixed at a point at which their centres of mass and gravity coincide with each other.

$$F_G \propto D$$

$$F_G = GD \quad (\text{RK-1-Equation}) \quad (1)$$

When $X_{cm} - X_{cg} = 0$,

where

D = distance of separation between two moving objects (motion due to gravity) when their centres of mass and gravity coincide with each other.

F = gravitational force acting on coincided centres between two moving objects (gravitational motion) when their centres of mass and gravity coincide.

G = gravitational constant, which equals $6.674038 \times 10^{-11} \text{ Nm}^2 \cdot \text{Kg}^{-2}$.

X_{cm} = Sun and planet's centre of mass.

X_{cg} = centre of gravity of the Sun and planet.

Gravitational force acting on coincided centers of mass and gravity of Sun and its planets can be calculated by using Table 1 as:

1) Gravitational force between Sun and Mercury

$$F = GD = 6.6674038 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 57.9 \times 10^6 \text{ km} = 3.86 \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

2) Gravitational force between Sun and Venus

$$F = GD = 6.6674038 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 108.2 \times 10^6 \text{ km} = 7.21 \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

3) Gravitational force between Sun and Earth

$$F = GD = 6.6674038 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 149.6 \times 10^6 \text{ km} = 9.98 \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

4) Gravitational force between Sun and Mars

$$F = GD = 6.6674038 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 228.0 \times 10^6 \text{ km} = 15.20 \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

5) Gravitational force between Sun and Jupiter

$$F = GD = 6.6674038 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 778.5 \times 10^6 \text{ km} = 51.90 \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

6) Gravitational force between Sun and Saturn

$$F = GD = 6.6674038 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 1432.0 \times 10^6 \text{ km} = 95.47 \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

7) Gravitational force between Sun and Uranus

$$F = GD = 6.6674038 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 2867.0 \times 10^6 \text{ km} = 191.15 \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

8) Gravitational force between Sun and Neptune

$$F = GD = 6.6674038 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 4515.0 \times 10^6 \text{ km} = 301.03 \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

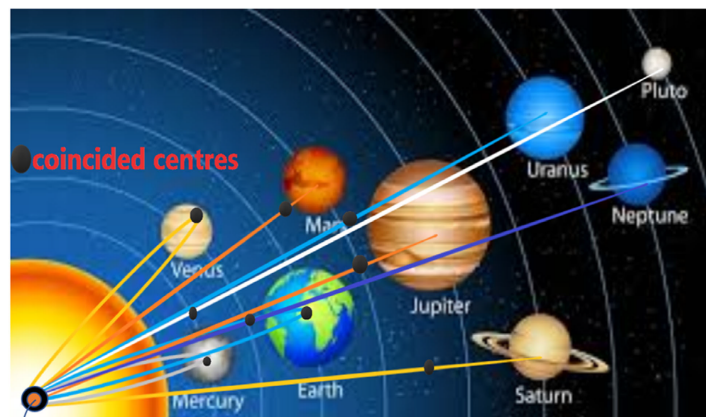
9) Gravitational force between Sun and Pluto

$$F = GD = 6.6674038 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 5906.4 \times 10^6 \text{ km} = 393.80 \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

Here, unit $\text{N} \cdot \text{m}^3 \cdot \text{Kg}^{-2} = \text{N} \cdot (\text{m}^3/\text{Kg}) \cdot \text{Kg}^{-1}$ and $\text{m}^3/\text{Kg} = \text{Specific Volume}$

So, Gravitational force acting on coincided centers of mass and gravity can be defined as “force in newton acting on specific volume per kilogram”.

These calculations also suggest that with the increase in distance of separation between two moving objects, the coincided centre of mass and gravity is shifted towards a heavier object. That is why gravitational force acting on coincided centers increases with increase in distance of separation between two moving objects. The gravitational force acting on coincided centers will be strongest when coincided centre of mass and gravity of Sun and planet will overlap with the coincided centre of mass and gravity of Sun. That is why gravitational force between Sun and Pluto is strongest while Gravitational force between Sun and Mercury is weakest because the coincided centers almost overlapped with the centre of mass and centre of gravity of mercury. Same is the case with Sun and Earth and to some extent with Sun and Venus (Figure 14).



The gravitational force will be strongest when coincided centre of mass and gravity of sun and planet will overlap with the coincided centre of mass and gravity of sun.

Figure 14. Concept map of coincided centre of mass and centre of gravity.

For our solar system, a macro gravitational constant (C_G) is obtained when we multiply the gravitational force acting on coincided centres with a value, which is obtained by dividing the sum of mass of the Sun and planet ($M_1 + M_2$) with the distance of separation D .

$$(M_1 + M_2)/D \times F_G = C_G = 1.326 \times 10^{20} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-1}$$

So,

$$F_G = C_G \times D / (M_1 + M_2) \quad (\text{RK-2-Equation}) \quad (2)$$

On equalizing Equations (1) & (2) we have

$$GD = C_G \times D / (M_1 + M_2)$$

Multiply both sides with $(M_1 + M_2)/D$

$$GD \times (M_1 + M_2) / D = C_G \times D / (M_1 + M_2) \times (M_1 + M_2) / D$$

$$G(M_1 + M_2) = C_G$$

$$(M_1 + M_2) = C_G / G$$

$$C_G / G = (M_1 + M_2)$$

$$U_C = (M_1 + M_2)$$

where $U_C = C_G / G = 1.326 \times 10^{20} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-1} / 6.674 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2}$
 $= 1.9891 \times 10^{30} \text{ Kg}$

For our solar system, macro universal constant U_C has value $1.9891 \times 10^{30} \text{ Kg}$
Gravitational force acting on coincided centers between electron and proton in different orbits in H-atom can be calculated as:

$$F_G = GD \quad (1)$$

here, $D = r =$ radius of nth orbit and $G =$ Newton gravitational constant.

For $n = 1$ $r = 0.529 \text{ \AA} = 5.29 \times 10^{-11} \text{ m}$

$$F_G = GD = 6.674 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2} \times 5.29 \times 10^{-11} \text{ m}$$

$$= 3.530 \times 10^{-21} \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

For $n = 2$ $r = 2.116 \times 10^{-10} \text{ m}$

$$F_G = GD = 14.122 \times 10^{-21} \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

For $n = 3$ $r = 4.761 \times 10^{-10} \text{ m}$

$$F_G = GD = 31.77 \times 10^{-21} \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

For $n = 4$ $r = 8.469 \times 10^{-10} \text{ m}$

$$F_G = GD = 56.52 \times 10^{-21} \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

For $n = 5$ $r = 1.322 \times 10^{-9} \text{ m}$

$$F_G = GD = 88.29 \times 10^{-21} \text{ N} \cdot \text{m}^3 \cdot \text{Kg}^{-2}$$

For microscopic objects, a micro gravitational constant (c_G) is obtained when we multiply the gravitational force with a value which is obtained by dividing the sum of mass of the nucleus or proton and electron ($M_1 + M_2$) with the radius of orbit.

$$(M_1 + M_2)/D \times F_G = c_G = 1.115 \times 10^{-37} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-1}$$

So,

$$F_G = c_G \times D / (M_1 + M_2) \tag{2}$$

On equalizing Equations (1) & (2) we have

$$GD = C_G \times D / (M_1 + M_2)$$

Multiply both sides with $(M_1 + M_2) / D$

$$GD \times (M_1 + M_2) / D = C_G \times D / (M_1 + M_2) \times (M_1 + M_2) / D$$

$$G(M_1 + M_2) = C_G$$

$$(M_1 + M_2) = C_G / G$$

$$C_G / G = (M_1 + M_2)$$

$$u_c = (M_1 + M_2)$$

where $u_c = C_G / G = 1.115 \times 10^{-37} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-1} / 6.674 \times 10^{-11} \text{ N} \cdot \text{m}^2 \cdot \text{Kg}^{-2}$
 $= 1.670 \times 10^{-27} \text{ Kg}$

For microscopic particles, the micro universal constant u_c has a value of $1.670 \times 10^{-27} \text{ Kg}$. The values of constants are different for the visible and invisible universes, just like we cannot use James Webb or Hubble to observe sub-atomic particles.

Table 1. Planetary fact sheet: metric [25].

	Mercury	Venus	Earth	Moon	Mars	Jupiter	Saturn	Uranus	Neptune	Pluto
Mass (10^{24} kg)	0.330	4.87	5.97	0.073	0.642	1898	568	86.8	102	0.0130
Diameter (km)	4879	12,104	12,756	3475	6792	142,984	120,536	51,118	49,528	2376
Density (kg/m^3)	5429	5243	5514	3340	3934	1326	687	1270	1638	1850
Gravity (m/s^2)	3.7	8.9	9.8	1.6	3.7	23.1	9.0	8.7	11.0	0.7
Escape Velocity (km/s)	4.3	10.4	11.2	2.4	5.0	59.5	35.5	21.3	23.5	1.3
Rotation Period (hours)	1407.6	-5832.5	23.9	655.7	24.6	9.9	10.7	-17.2	16.1	-153.3
Length of Day (hours)	4222.6	2802.0	24.0	708.7	24.7	9.9	10.7	17.2	16.1	153.3
Distance from Sun (10^6 km)	57.9	108.2	149.6	0.384*	228.0	778.5	1432.0	2867.0	4515.0	5906.4
Perihelion (10^6 km)	46.0	107.5	147.1	0.363*	206.7	740.6	1357.6	2732.7	4471.1	4436.8
Aphelion (10^6 km)	69.8	108.9	152.1	0.406*	249.3	816.4	1506.5	3001.4	4558.9	7375.9
Orbital Period (days)	88.0	224.7	365.2	27.3*	687.0	4331	10,747	30,589	59,800	90,560
Orbital Velocity (km/s)	47.4	35.0	29.8	1.0*	24.1	13.1	9.7	6.8	5.4	4.7
Orbital Inclination (degrees)	7.0	3.4	0.0	5.1	1.8	1.3	2.5	0.8	1.8	17.2
Orbital Eccentricity	0.206	0.007	0.017	0.055	0.094	0.049	0.052	0.047	0.010	0.244
Obliquity to Orbit (degrees)	0.034	177.4	23.4	6.7	25.2	3.1	26.7	97.8	28.3	122.5
Mean Temperature (C)	167	464	15	-20	-65	-110	-140	-195	-200	-225
Surface Pressure (bars)	0	92	1	0	0.01	Unknown*	Unknown*	Unknown*	Unknown*	0.00001
Number of Moons	0	0	1	0	2	79	82	27	14	5
Ring System?	No	No	No	No	No	Yes	Yes	Yes	Yes	No
Global Magnetic Field?	Yes	No	Yes	No	No	Yes	Yes	Yes	Yes	Unknown
	Mercury	Venus	Earth	Moon	Mars	Jupiter	Saturn	Uranus	Neptune	Pluto

11. Static Universe

“If energy travels without a source, then this universe must be a thermostat and must be Static”.

All types of energy travel through material sources. Material sources are essential for all types of energies to travel from one point to another in this universe. Let us suppose that energy travels through space without a source. The universe must attain a uniform temperature due to the free flow of energy and should become a thermostat which has a constant temperature and homogeneity must occur in this universe. At this state, there must be no change because there is no flow of energy and everything in this universe must be static. So, overall, this universe would be static. Secondly, if we suppose that energy travels without a source in space, then there must not be any hot or cold regions in this universe, but we know that different temperature zones exist in this universe, varying in temperature from very low to very high. In some regions of this universe, new galaxies burn, while in others, old ones die. Changes always happen due to the flow of energy. All types of radiation, including natural like electromagnetic radiation and artificial radiation (radiations emitted during fission, fusion, and artificial radioactivity), are material particles which carry energy from one point to another point in this universe. The smaller the mass of radiation, the greater will be its energy, the higher will be its frequency and velocity, and the smaller will be its wavelength. Similarly, a wave is the property of matter. No wave forms without material particles. When mass is zero, the wave is also zero.

According to Einstein:

$$E = mc^2 \quad (1)$$

According to Planck,

$$E = h\nu \quad (2)$$

Combining both

$$\begin{aligned} h\nu &= mc^2 \\ hc/\lambda &= mc^2 \\ h/\lambda &= mc \\ h/mc &= \lambda \\ \lambda &= h/mc \end{aligned} \quad (3)$$

when $m = 0$,

then $\lambda = h/0 \times c = 0$,

so, $\lambda = 0$.

According to my concept:

“Nothing is infinite in this universe-everything is finite except ALLAH (the creator of this universe)”

When we say that $\lambda = h/0$.

It means that

$$\lambda \times 0 = h \quad \text{or} \quad h = 0$$

if $h = 0$ then $\lambda = h/0$ must be equal to zero.

[If we consider that

$$\lambda \times 0 = \lambda$$

$$h/0 = h$$

But this will change the whole mathematics and will not be acceptable by mathematicians.]

When we say $\lambda = h/0 = \text{infinity}$, it's just our calculating error.

So, when mass is zero, then $\lambda = 0$ and no wave forms. Similarly, when $\lambda = 0$, no mass exists. As a result, it demonstrates that a wave is only a property of matter, and that energy can only travel from one point to another in this universe via material sources capable of forming waves. So, we can calculate the wavelength formed by any object and we can also calculate the mass possessed by any object by using the above equation. 3 when $c = v$. But energy and matter are interconvertible. Energy changes into matter and matter changes into energy at sub-atomic levels (like fission and fusion and fusion reactions) as well as at the galaxy level. Old galaxies fall into white holes and change into energy, while new galaxies burn from black holes. "Every material particle (or object) is a storehouse of energy".

Comparison between Mass and Energy:

Dissimilarities:

Matter possesses mass, but energy does not possess mass.

Matter possesses weight but energy does not possess weight.

Similarities:

Energy cannot travel without matter.

Matter cannot travel without energy.

12. Nature Moves from Simplicity to Complexity and Back to Simplicity

Nature starts in a very simple way, gradually moves towards complexity, and then moves back to simplicity (Figure 15). Example development of the structure of a protein.

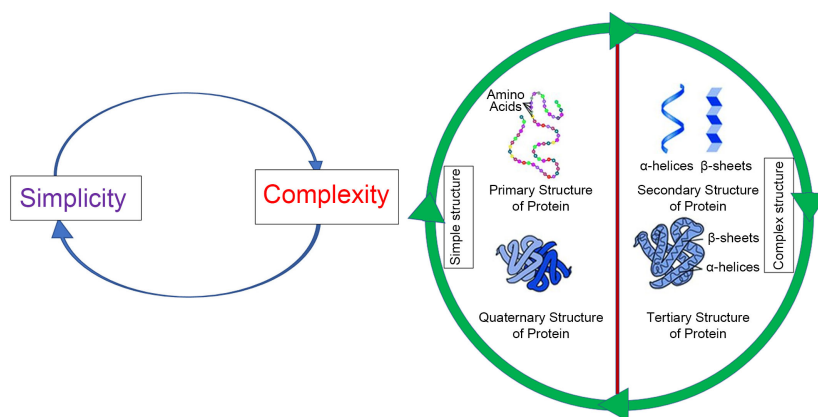


Figure 15. Concept map of simplicity and complexity.

13. Conclusions

All microscopic bodies as well as all macroscopic bodies are in motion along curved paths. The universe inside an atom is as vast as the visible universe. An atom consists of millions of particles or particle galaxies which contain central energy pools or central energy cores. Energy pools are present in the centre of the invisible universe inside atomic or subatomic particles from which particles and energy are continuously interconverted. In a dense central energy pool, two opposite charges are created due to the swirling motion of microscopic energy droplets. Small microscopic energy droplets may swirl either clockwise or anti-clockwise to produce microscopic tornadoes which are non-superimposable mirror images of each other and gain the property of positive and negative charges. Hence, the electrostatic force is originated between these two opposite charges, which are then changed into a pair of particles, *i.e.* catitron, which carries a positive charge, and an anitron, which carries a negative charge. All the other millions of subatomic particles or particle galaxies are produced in the same way. So, the electrostatic force is the basic force, and all other forces originate from this basic electrostatic force of attraction. When charged particles move, they produce an oscillating electric field and the spinning of these particles produces oscillating magnetic fields. These oscillating electric and magnetic fields are perpendicular to each other and, by their interaction, an oscillating gravitational field is produced, which is also perpendicular to both the oscillating electric field and the oscillating magnetic field. Gravity is not a cause of space-time curvature, but gravity causes space-time curvature. Space-time curvature is nothing but a curved path around a heavy object.

All objects are in motion due to the inherent property of clockwise and anti-clockwise swirling of energy droplets. All microscopic as well as macroscopic objects move on the same principle. The Earth's axial tilt, which causes the Earth's precessional motion, is caused by the parallel alignment of the Earth's magnetic field with the magnetic field of the Sun. Time is not an independent quantity. It depends upon the distance. The time difference between two points increases with distance. If the same event is happening at two points at the same moment, it will be observed by two observers at different time intervals if they are not equidistant from the two points of events.

The gravitational force acting on coinciding centers is directly proportional to the distance of separation of two moving objects when their centers of mass and gravity coincide with each other. The distance of separation between two objects (motion due to gravity) is fixed at a point where their centers of mass and gravity coincide. The gravitational force acting on coincided centers will be strongest when the centers of mass and gravity of the Sun and planet overlap. That is why the gravitational force between the Sun and Pluto is strongest, while the Sun and Mercury are weakest. The values of constants are different for the visible and invisible universes, just like we cannot use James Webb or Hubble to observe sub-atomic particles. Nature starts in a very simple way, gradually moves towards complexi-

ty, and then moves back to simplicity. “The Universal Theory of Visible and Invisible Universe—The Whole Theory of This Universe—A Step Forward to Einstein”, opens new windows in the challenging fields of science and research *i.e.* visible and invisible universe, universe inside an atom, interconversion of matter and energy from microscopic bodies to macroscopic bodies levels, how electrostatic force generates, how electric field, magnetic field, and gravitational fields are produced and are interlinked, how planets revolve around Sun and electron revolves around the nucleus, unification force theory, universal law, what is the stuff of whole universe? What will happen at the end of this whole universe?

Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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