

MODERN THEORY OF RELATIVITY

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Abstract

According to Einstein's Special theory of Relativity Mass and Energy are one and the same, as per his General theory of Relativity Space is the same as Time.

Modern Relativity explains the Integration of Special Relativity and General Relativity.

Einstein's Special Theory of Relativity deals with the cause of Materialization and the reason for the speed of light being constant in any direction. His General Theory of Relativity deals with the bending and the Space which is warped and what act as the unified force. The answer to these is explained in Modern Theory of Relativity.

Albert Einstein's 'Theory of Relativity' is based on the kinetic force of velocity of light. Modern Relativity is on the basis of the Static Force of the Space at rest.

Einstein in his Relativity Theory explains the effect of light with high speed and its Special characteristic.

Similarly Modern theory of Relativity explains the negative effects of static space.

The space which is static has inverse effects, like that of effects of light at high speed. When an object travels with the velocity of light the following changes takes place, Mass Increases, Time is Dilated, Length Contracts and Volume Shrinks. In the same way, inverse effect-occurs in the tranquil static Space.

NEW KINEMATICS AND NEW DYNAMICS

- 1) Great speed results in the Shrinking of Volume and formation of minute particles, Extreme Tranquility makes the Volume Infinite, limitless and extensive and that is Space.
- 2) Tremendous speed enhances Increasing of Mass,

While Tranquility deteriorates Space becomes Massless.

3) Immense speed reduces Distance and Time, Whereas the reverse process takes place in Tranquility.

4) Rapidity makes the center of Spinning, motionless and static whereas Tranquility enhances the Spinning Speed.

According to this fourth factor of Modern Relativity, it is very clear that the dynamic force should have occurred from the static force.

Every self-rotatory object with intense speed attains a state of rest at the center.

Rapidity loses the motion at the center making it static but creates a spinning motion within itself at Tranquility which enhances this force.

The rapid dynamic force of moving bodies is caused by the static force. It is clear that the static state is due to the rapid dynamic force that surrounds it.

There is great possibility of very slow movements or even speedy stir in tranquility and static state. It is relevant that this tranquility is the cause of slow or fast movements in space.

Therefore it is the static state that has caused the dynamic state.

The dynamic force must have been the transition from the static force.

There is a stir in silent space and extreme speed in tranquility.

The immobile state has the rapid mobility. The serene static state is the cause and reason, for this.

STATIC TRANQUILITY CREATES A STIR

Vastness, extensive and greatness of things lead to the possession of the compressive force.

EX:- The pressure that exists in the depth of the ocean and pressure of the atmosphere can be cited as examples.

The high pressure produced by the downward thrust in the ocean produces the upward thrust caused by tiny particles I e., the air bubbles which are weightless and they move towards the surface at intense speed.

In the same way the air molecules in the atmosphere move upwards at great speed. [H, He]

The mysterious, extensive space of the universe holds within itself immutable pressure, resulting in uniform self-compressibility of the universe leading to the combined heavy atoms being pulled towards the center. On the other hand the feather-light photons move away from the center in the direction of the emission trying to escape from the center, i.e., with escape velocity which is due to centrifugal force.

Thus their velocity is unalterable and constant due to the super force of Space.

As a result, atoms with greater mass are attracted towards the center and light particles move away and escape velocity from the center, this being the consequence of the inherent, static precise uniform Specific Gravity, the light particles are pushed away from the center into the Space and attains escape Velocity.

But the surrounding pressure of the space makes light travel accurately.

Light travels with the same velocity in all directions (360° degree) due to Specific Gravity. As a result the photons getting accelerated and is constant.

The surrounding which is the unified force is the cause of constant velocity of light and the light travel along the bent path. **Thus the spreading of light in space is termed as dispersion.**

The self-compressive force of a particle acts upon itself as surrounding pressure. This is the cause for the existence of the universe and its principle of motion, the Unified Force.

The Self- compresses force which causes Materialization and the unified force that compressive the whole universe is together known as specific Gravity.

As a result the photons getting accelerated and is constant.

Likewise, the self-compressibility within objects itself is the cause of the force that act on the external surrounding. The infinite space in static state has created the dynamic state. In other words vacuum has caused a stir.

Key words: Static Tranquility, Tranquility Static state, primordial state, Self –compressibility, Materialization.

Title! - Modern Theory of Relativity

Introduction:-

This article throws light on Materialization by answering the following questions:

- (i) Which is the principal source of all existing energy?,
- (ii) How did this energy transform itself into atom and then get created into matter?

Modern Theory of Relativity explains the Integrating force of the Universe and its supporting theories i.e., the velocity of light is constant in any direction and the reason for the bending of Space according to the principle of physics.

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According to Einstein's Special theory of Relativity Mass and Energy are one and the same, as per his General theory of Relativity Space is the same as Time.

Modern Relativity explains the Integration of Special Relativity and General Relativity.

Einstein's Special Theory of Relativity deals with the cause of Materialization and the reason for the speed of light being constant in any direction.

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General Theory of Relativity deals with the bending and the Space which is warped and what act as the unified force. The answer to these is explained in Modern Theory of Relativity.

Materials :-

According to Newtonian Mechanics, there did not exist any relationship between mass, time, length and Space. In particular, Space was not considered to have any relationship with any object.

Take for instance, two trains, at rest in two different tracks in a Railway station. An observer from one train watches the other train departing from the station.

The observer can realize whether his train is at rest or in motion only by seeing the station. If he still sees the station, it means the other train has left and his train is at rest.

This example makes it clear that the state of rest and uniform motion in a particular direction depends on each other.

To an observer, a falling object might seem to fall in a vertical path, but to an observer in a moving train, it may seem to run in parabolic path.

In order to define motion, the frame in which it happens should be defined at first.

The velocity of light in free Space may appear to be the same for all observes. The Speed depends on the observer.

The velocity of light in a moving frame depends neither on the source of light to nor the velocity of the observer in motion.

In the Nineteenth century, Scientists felt that a medium, ether was needed for Scattering of light and that the Eternal Space was filled with this irremovable ether. But the research of Michelson and Morley made the concept of Ether and unrelated Space theory meaningless.

But Einstein's theory of relativity rejected these theories. He said that every motions in universe depended on one another and that length, mass, time and Space depended on one another. There is interdependency in these.

Einstein Special Theory of Relativity (1905)

In 1905, Einstein formulated the Special Theory of Relativity. The Special Theory of Relativity explains the happenings when one frame depends on another frame while moving with constant velocity.

Constant value velocity of light becomes the main Source for the creation of the Special Theory of Relativity.

Special theory of Relativity will not exist without the concept of velocity of light.

The Velocity of light is constant "C" and its measurement is $C = 2.99792 \times 10^8 \text{m/sec}$.

The velocity of light in free Space is the same for all observes. The Speed depends on the observer.

The Special Theory of Relativity Explain the velocity of light and the relationship of mass energy.

Anything including weight, shape, time will not to be constant. The only thing which cannot be changed in the universe is the Speed of light.

According to Einstein, the Shape of a Material Shrinks when it travels with the Speed of light, increasing mass, reducing the distance and time, the Velocity of Light will be constant only by adjusting it.

Atom is very small and cannot be viewed by our naked eyes. The Wide Spread Space cannot be viewed by our vision.

Einstein Theory of relativity brought the Hidden Miracles of both the concept.

Einstein said that a small atom is enough to produce a huge amount of energy.

Einstein Mass Energy Relation Einstein equation $E=MC^2$

Einstein's General Theory of Relativity (1915)

In 1915 Einstein derived the General theory of relativity. According to the General Theory of Relativity light travels in a bending path (Bending of light)

According to the universal law of gravitation, photons are not bent. Due to the gravity, universal itself is a curvature.

Einstein concluded that particles like photons cannot be removed by the force of gravity and the whole free Space itself is in a bending state.

To the existing three dimensional the Space i.e., length, breadth and height Einstein added time and calculated four dimensional Space Time.

This leads to the notion that massive objects like sun, earth (etc) and space surrounding them has the tendency to curve forming Space Time Curvature.

Einstein concluded that the planets are revolves in the Space Time Curvature.

Einstein theory of Space Time curvature opposes Newton's Gravitational Theory, while Newton said gravity Pulls, Einstein said Space Time Curvature pushes towards earth.

Einstein explains gravitational force in another dimension i.e., Space that surrounds the earth compress it the resulting in the falling of the object, towards the Earth.

The truth about Space Time Curvature was proved in 1919 during the solar eclipse.

Einstein decided that "Bending nature" of Space could create a strong boundary.

Einstein later altered his idea that the universe cannot be static and that it can contract or expand.

According to Space Time Curvature, we know the truth that the Space we see is not in a straight line and it makes us believe strongly that Space is curved.

The space that is extending with a strong boundary should have an external structure.

Einstein's unified field theory is one of the evidence for the above mentioned.

So as for the pertinent unified field theory Einstein decided that the Source for everything should be a Single one.

I would like to explain the concept of Einstein Theory of Relativity briefly.

Einstein said that the disentanglement of material become energy and the combination of energy become material. (i.e) $E=M \square^2$

Though Einstein has deeply investigated on how energy is transformed into materials i.e., Mass Energy relation, he does not try to explain Materialization.

Einstein's Special Theory of Relativity deals with the cause of Materialization and the reason for the speed of light being constant in any direction. His General Theory of Relativity deals with the bending and the Space which is warped and what act as the unified force. The answer to these is explained in Modern Theory of Relativity.

Modern Theory of Relativity

This article throws light on Materialization by answering the following questions:
(i) Which is the principal source of all existing energy?,
(ii) How did this energy transform itself into atom and then get created into matter?

Modern theory of Relativity explains the Integrating force of the Universe and its supporting theories i.e., the velocity of light is constant in any direction and the reason for the

bending of Space according to the principle of physics.

The supreme source of energy responsible for the genesis and functioning of the universe encompass all other forms of energy and is confined to the Law of Conservation of Energy.

Vacuum is not exactly empty ness.

The Modern physics holds an excellent and sensitive discovery that in Space what we consider as vacuum is not actually empty ness.

Space teems with an energy that is primordial and inherent, flooding even vacuum.

This ceaseless energy creates particles continuously and at times gets frozen to form paired particles.

This happens incessantly in instant producing Billions and Billions of particles even in vacuum. Quantum Mechanism states that nobody can understand and feel this.

The principle of quantum Mechanism states that vacuum is filled with anenergy.

The assumption, vacuum is filled with energy, leads to the notion that vacuum and energy are two different things, or two dimensions.

If we consider vacuum and energy as two different types of existence the existing energy may appear in one period and disappear in another and may or may not exist in one place.

This assumption leads to the question, "How can such energy be inherent and static everywhere and in everything? This would be against the Law of Conservation of Energy.

Law of Conservation of Energy

Energy can neither be created nor be destroyed. If one state of energy disappears it appears in some other form equal to the energy lost. Universe is filled with one and only energy. New energy can neither be created nor existing

energy be destroyed. All we can do is to transform energy from one state to another. For instance, take an object falling from a certain height on its own without any obstruction. Its potential energy decreases and its kinetic energy increases.

Space is the static field of energy. Even at rest space is filled with static energy.

INERTIA OF REST

It is the inability of the body to change, its state of rest by itself.

Newton's First Law of Motion

This inability of a body to change by itself, its state of rest or uniform motion along a straight line or direction, is known as Inertia. The Inertia of a body is directly proportion to the mass of the body.

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Perpetual motion

External force is necessary to set an object in motion. Perpetual motion cannot exist without the stimulation of external force, this principle hold good not only for the atomic energy but also for the functioning of the universe.

MOMENT OF INERTIA

Newton's Second Law of Motion A body must continue in its state of rest or uniform motion in a straight line and motion.

In any state of an object, the static energy that is lost is equal to the kinetic energy.

NEW KINEMATICS AND NEW DYNAMICS

There exists some force in Space which is static and dynamic. Matter comes into existence or existing matter perishes when there is transition from one state to another. The transition of the static force of Space into dynamic force is Materialization.

During the phenomena of Materialization, static energy potential energy and kinetic energy transforms from one state into another.

This is based on the law of Conservation of energy and Conservation of law of angular momentum.

Consequently paired particles are produced on Materialization.

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In the same way, inverse effect-occurs in the tranquil static Space.

3) Great speed results in the Shrinking of Volume and formation of minute particles, Extreme Tranquility makes the Volume Infinite, limitless and extensive and that is Space.

4) Tremendous speed enhances Increasing of Mass, While Tranquility deteriorates Space becomes Massless.

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4) Rapidity makes the center of Spinning, motionless and static whereas Tranquility enhances the Spinning Speed.

According to this fourth factor of Modern Relativity, it is very clear that the dynamic force should have occurred from the static force.

Every self-rotatory object with intense speed attains a state of rest at the center.

Rapidity loses the motion at the center making it static but creates a spinning motion within itself at Tranquility which enhances this force.

The rapid dynamic force of moving bodies is caused by the static force. It is clear that the static state is due to the rapid dynamic force that surrounds it.

There is great possibility of very slow movements or even speedy stir in tranquility and static state. It is relevant that this tranquility is the cause of slow or fast movements in space.

Therefore it is the static state that has caused the dynamic state.

The dynamic force must have been the transition from the static force.

As per Newton's law of motion, in Nature, every action has equal and opposite reaction.

There is a stir in silent space and extreme speed in tranquility.

The immobile state has the rapid mobility. The serene static state is the cause and reason, for this.

CONSERVATION AND TRANSFORMATION

The concept, universe came into existence from empty Space is misleading.

In fact the pure Space has been transformed and is existing as universe.

It is a wrong notion that Space and mass are two separate entities.

Any one object coming into existence and its functioning is a part of Space.

It should not be misconceived that Space is Vacuum and has no energy as force.

Absolute space is extremely limitless and inherent and so there exists a (Kinematic quivering) continuous and incessant stir.

This stir when unifying in a particular spot and intensifying gets compressed and becomes super energy. This is Nature energy.

The momentum due to internal pressure gains self-compressibility and becomes angular momentum.

Therefore it is clear that space is not static but exists as constant potential force.

This vacuum which possesses the constant potential force is self-compressed and when it attains kinetic energy, accumulates in a spot as mass.

When mass becomes denser, the internal energy, I e, angular velocity increases causing Rotatory motion or Rotatory wave motion and followed by Time.

The rotator wave, unable to resist the incessant surrounding pressure of the Eternal Space, attains immeasurable speed and transforms into a particle of infinitesimal volume.

According to Einstein's Theory of Relativity as velocity increases the mass and density of particles increase resulting in the rotator waves getting transformed into infinitesimal particles.

This powerful Rotatory wave with the circular motion is the infinitesimal particle.

The compressive force that causes of Materialization is the Unified Force. The particle formed as a result of this force is the Unified Mass.

Even if, space compresses itself and starts functioning in Static state, according to law of conservation of Energy, in any state of an object, the value of the potential energy that is

lost would be equal to the value of kinetic energy it attains.

Due to the self-compressive, surrounding pressure of force of the Space, the Universe experiences a static and uniform pressure.

The self-compressive force of a particle acts upon itself as surrounding pressure.

This is the cause for the existence of the universe and its principle of motion, the Unified Force.

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As a result, atoms with greater mass are attracted towards the center and light particles move away and escape velocity from the center, **this being the consequence of the inherent, static precise uniform Specific Gravity**, the light particles are pushed away from the center into the Space and attains escape Velocity.

But the surrounding pressure of the space makes light travel accurately.

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The surrounding which is the unified force is the cause of constant velocity of light and the light travel along the bent path.

Thus the spreading of light in space is termed as dispersion.

Likewise, the self-compressibility within objects itself is the cause of the force that act on the external surrounding. The infinite space in static state has created the dynamic state. In other words vacuum has caused a stir.

Conclusion:-

The self-compressive force of a particle acts upon itself as surrounding pressure. This is the cause for the existence of the universe and its principle of motion, the Unified Force.

The self-compressing force is referred by Einstein as frame dragging, the objects which are massive like sun and earth compressive itself and warps the surrounding Space due to surrounding pressure. This is the Space Time Curvature as explained by Einstein.

The self-compressing force is called frame Dragging, The surrounding pressure is called Space Time Curvature.

The Self-compresses force which causes Materialization and the unified force that

compressive the whole universe is together known as specific Gravity.

As a result the photons getting accelerated and is constant.

The surrounding which is the unified force is the cause of constant velocity of light and the light travels along the bent path. Thus the spreading of light in space is termed as dispersion.

The self-compressive unified force causes self-rotatory motion (planetary motion) and the gravitational and reflexive force. The Gravitational force act as an interrupting force in all particles in the universe from atom to galaxy making the Gravitational force as Repulsion Force.

This gives a clear picture that Gravitational force does not always act as attracting force. The integrative force of the three types of force i.e., Gravitation, Repulsion and Rotation is Specific Gravity.

Albert Einstein states, "Nature loves simplicity to a great extent, Mathematical Language conceals the simplicity of seamless Nature."

Key words: Static Tranquility, Tranquility Static state, primordial state, Self-compressibility, Materialization.

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I thank sincerely Almighty God for His grace and strength which helped me to complete this work.

I was inspired by the principles of Sir Albert Einstein during childhood. For the past twenty years I have been studying and doing research in Einstein's principles. The United Nations Organization declared **2005** to be the International Year of Physics. This declaration coincides with the 100th anniversary of physicist Albert Einstein's "miraculous year." In 1905, Einstein wrote three of his most famous scientific papers. These legendary articles provided the basis of three fundamental fields in physics: the theory of relativity, quantum theory and the theory of Brownian motion. UNO's declaration to commemorate the centenary of Einstein's theories and my admiration towards Einstein motivated me to start this work.

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