

Article

Cosmic Perspective of the Beginning

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Abstract

This paper proposes a theory of evolution of universe. The universe is simple and expanding. New matter is being added to the universe at a sustained rate. Proposition also needed specifying two new dimensions of Consciousness (Intelligence or sentience) and Energy/Matter. The model of this universe aims to explain the expanding nature of universe, shape of objects, and circular motion in space. This model accounts for observations such as the correlation of distance and red shift of galaxies, dark matter, dark energy and the microwave radiation background of the universe. The conclusions of the paper are as follows:

- (a) The evolution of universe is not from one Big Bang but continuous since the beginning.
- (b) That the evolution of universe started from absolute zero.
- (c) That the principles of Maya (Illusion) can be seen in formation of the wave from naught and formation of elementary particles from waves because of barrier of speed of light.
- (d) That there are a number of dimensions and sub dimensions based on attributes.
- (e) The universe is not moving radically outwards from its center but moving tangentially outwards from its center in spiral arms.
- (f) Consciousness has created nature and by experimentation about nature.

Keywords: Origin, universe, dimension, consciousness, intelligence, sentience, energy, matter.

Introduction

The most popular theory of our universe's origin centers on a cosmic cataclysm unmatched in all of history - the big bang. This theory was born of the observation that other galaxies are moving away from our own at great speed, in all directions, as if they had all been propelled by an ancient explosive force. Big bang proponents suggest that some 10 billion to 20 billion years ago, a massive blast allowed all the universe's known matter and energy - even space and time themselves - to spring from some ancient and unknown type of energy. The theory maintains that, in the instant - a trillion-trillionth of a second - after the big bang, the universe expanded with incomprehensible speed from its pebble-size origin to astronomical scope. This expansion has apparently continued, but much more slowly, over the ensuing billions of years. Scientists are not sure exactly how the universe evolved after the big bang. Many believe that as the time passed and the matter cooled, more diverse kinds of atoms began to form, and they eventually condensed into the stars and galaxies of our present universe.

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Before the big bang, scientists believe the entire vastness of the observable universe, including all of its matter and radiation was compressed into a hot, dense mass just a few millimeters across. This nearly incomprehensible state is theorized to have existed for just a fraction of the first second of time. The glow of cosmic microwave background radiation, which is found throughout the universe, is thought to be a tangible remnant of leftover light from the big bang. The radiation is akin to that used to transmit TV signals via antennas. But it is the oldest radiation known and may hold many secrets about the universe's earliest moments. The big bang theory leaves several major questions unanswered. One is the original cause of the big bang itself. [1] Discoveries in the early 20th century have suggested that the Universe had a beginning and that space has been expanding since then,[2] and is currently still expanding at an increasing rate.[3]

The Big Bang theory is the prevailing cosmological description of the development of the Universe. Under this theory, space and time emerged together 13.799±0.021 billion years ago [4] with a fixed amount of energy and matter that has become less dense as the Universe has expanded. After an initial accelerated expansion at around 10–32 seconds, and the separation of the four known fundamental forces, the Universe gradually cooled and continued to expand, allowing the first subatomic particles and simple atoms to form. Dark matter gradually gathered forming a foam-like structure of filaments and voids under the influence of gravity. Giant clouds of hydrogen and helium were gradually drawn to the places where dark matter was most dense, forming the first galaxies, stars, and everything else seen today. However, **Big Bang theory fails to explain from where the initial compressed matter came or originated, and what triggered the giant explosion. The assumption of compressed matter itself indicates that it was not the beginning, and merely a transformation.** The estimates of time for the initial accelerated expansion at around 10–32 seconds describe the time which reference frame.

New Model of Universe

This New model of universe is a theory of simple universe and it aims to confirm both to metaphysical and scientific world. It should be able to unlock various mysteries that confound us from time to time.

The main postulate of the theory is of 'Reason'. Everything has a reason for happening. There is a cause for every event and then its effect. Newton's First Law of motion states that an object will remain at rest or in uniform motion in a straight line unless acted upon by an external force. It is a statement about inertia, that objects will remain in their state of motion unless a force acts to change the motion. If we apply that to universe, we see that Force was there to create the universe and to regulate it. The universe did not begin as a big bang as popularly believed but **it began in a continuous orderly fashion.**

What prevailed before the beginning of universe and its center is the great Void or zero (Cipher or numeral 0) (also known as Mahashunya - The absolute Zero). At that point, **there was only one dimension Consciousness and no space and no matter.** The consciousness may be defined as a fact of awareness by itself (itself being the interpreter). Consciousness can also be defined as intelligence or sentience. We must not stop here for lack of appropriate word because this is a

completely un-discussed dimension. One can also draw an analogy to a super-intelligent computer program that is self-aware and capable of controlling itself and the surrounding. Universe was created with a purpose (Sankalpa). The purpose of its creation not a subject here since we are first discussing the manner of its creation.

We all know that for something to be produced there must be some space and some energy and for that purpose only big bang theory assumed entire universe in a small space before the Big Bang. However, that matter was also required to be created first. Now let's go back to the beginning. In the beginning when there was no energy, no matter, no time. We can assume some external frame of reference about time but at that point it had no connotation because there were no events, no matter, no relativity.

Vedas say that the universe was created from nothing and if it is ended it will become nothing. The word, "Amen," "Aum," is the beginning of the Creation.

तत्सर्वशक्तिबीजजडप्रकृतिवासनाया च्छक्तभावः ।
प्रणवशब्दः दिक्कालाणवोऽपि तस्य रूपाणि ॥ ३ ॥

That omnipotent source (seed) has created nature.
Aum transforms in Space, time and matter etc.

That's why it is known an illusion or Maya. Maya is often misconstrued as illusion. Maya are the scientific principles which helped intelligent program to initiate the vibration and then created the matter out of those vibrations. John 1:1 is the first verse in the opening chapter of the Gospel of John. The verse reads: In the beginning was the Word, and the Word was with God, and the Word was God. Word here describes the vibration (nearest simile compared was sound vibration). The vibration signifies energy and it's what leads to creation of matter.

तदेव जगत्कारणं माया ईश्वरस्य, तस्य च्छष्टिरविद्या ॥ ४ ॥

That root cause of the universe is Maya, this is the knowledge which has been applied. The Maya can be seen as key principles used by the consciousness to create nature.

As we would need to format a memory drive to store information, the space was also formatted for creation of universe with the beginning of two parameters r (radial distance) and Θ (Solid angle) (polar coordinates) since universe extended from a point in spherical space (naturally- its center) which later became our Universe. Therefore, as a first move the space was created. **This formatting is the dark matter. The initial Vibration is Prana (Aum).** This is the background sound of the universe, rest everything is echo. The same echo can also be heard in sound of the stars. There is a reference in ancient texts in Sanskrit giving us a glimpse of supreme consciousness.

तत्र सर्वज्ञप्रेमबीजञ्चित् सर्वशक्तिबीजमानन्दश्च ॥ २ ॥

The creator is omniscient, omnipotent full of love and bliss. This quality is reasonable as because one who is creating, he knows what he is creating and since he is the only one and powerful enough of creating. The supreme consciousness is one which can also subdivide and represent various forms (Like a main programme may have may sub-programmes and modules which can function in interconnected/ embedded manner or independent. Three known major forms of Parmeshvera is Brahma, Vishnu and Mahesh (Shiva) and additional conscious forms. Sankrit words are extremely meaningful, appropriate and concise. The word 'Brahma' means expansion (Br) and 'amha' (Aum sound-Pranva). This means the program which took care of expansion of initial ever expanding vibration. He also formatted the 3D space. The space time fabric is one of the Maya (technique, illusion) of Brahma. The Brahmand is suffix with AND which is nothing but spheroid. The word 'Brahmand' means an expending spheroid. The one word describes it all.

Space which was created with expansion of Aum (Panav), a sustained thought (Sankalpa- a resultant of infinite executions of the program called supreme consciousness- God, Parmeshvara, One who is father of everything). The Aum vibrations spread from a point (center of universe), in a 360 deg solid angle space there originated a number of antipodal Vibrations extended outwards. This entity we can term as '**the vibration**' and it is difficult to be detected. This is called Pranav and it is the Dark Energy pervading the universe. This was also known as Aether by the Greeks after the Greek god of light - a substance believed to fill empty space. They believed that aether was all around us and that it also filled the vacuum of space. The Michelson–Morley experiment was a scientific experiment to find the presence and properties of a substance called aether. The experiment was done by Albert A. Michelson and Edward Morley in 1887. Michelson and Morley created this experiment to try and prove the theory that aether existed [4A]. The interferometer was designed to measure the speed and direction of the "aether wind" by measuring the difference between the speeds of light traveling in different directions. It did not achieve the aim. The aether was not detected by this experiment because **aether may not significantly affect the movement of light rays**. The light rays are one of the heaviest rays where the dual nature of photon (wave as well as particle) begins to be distinguished. Many aether waves after n number of constructive and destructive interferences created many different types of waves, one of them are also the light waves. How could a strand push a heavy rope? The impact of movement of aether may have an unappreciable/ immeasurable affect on light rays.

Since the beginning took place from a sustained, purposeful thought of consciousness and it is continuous, extending to the surface of an infinite sphere. **Even now 'the vibration' is generating; the way it started thus the universe is continuously forming and is of expending type.**

With the origination of the Vibration there came another dimension in existence- time. The time comes to existence if there is change (event). We know that a wave and an opposite wave of same characteristics can cancel out each other in a resultant cipher. This can happen only if time travels in reverse, $t = -T$ (time in reverse direction). In this case, the resultant cipher will create an equal and opposite wave. This has one more connotation, T may be t or $-t$, and it will flow in same direction. It may change over to the other side only at the time of re-creation of universe. Mathematically, If we take creation as a function $F(x)$ at Time $T=0$ t, then at $T= nt$ where $n>0$; $F(x) =$ Multiple equal and opposite wavelets originating outward from the source. The process $dF(x)/dx$ [from 0 to T_{∞}] is the process of creation of universe which is termed here as First

principle of 'Maya'. Maya may be defined here as an illusion, of being there what is actually not being there. The wavelets being present there which were not already there at $T=0t$. Now when something transforms the entire characteristics without even a hint about its original nature was termed as Maya by ancient seers.

This is why we may be living in inverted dimension of time. The process $dF(x)/dx$ is responsibility of Shiva and he is creator of Pranav (Akasha, aether or dark energy) or source of Aum vibration. Formless Shiva is a part of supreme consciousness and sharing the privilege with Brahma, Vishnu and others). He is the one who creates universe and the one who destroys it. Simply by stopping the function, there will be no new creation of Pranav. Even without inverting the time, the equal and opposite waves will be matched and merged and hence turned in to zero. This is what happens at meeting of particle and anti-particle. Both destroy each other and some energy is released, this energy is leftover wavelets which did not cancel out each other. The law of conservation of energy is first law of thermodynamics. It states that energy can neither be created nor destroyed; energy can only be transferred or changed from one form to another. This is applicable to stable particles and matter. The process of destruction of energy may possibly exist inside of a Black Hole. At $T=-nt$, if the direction is reversed, from expanding type of universe, it will stop expanding and then change to contracting type of universe. When this process starts we may be sure that than it is the beginning of Mahapralaya (the great destruction).

Therefore, with creation of vibration the universe had rumbled itself in motion. It is still happening at the center of universe. The 'Pranav' is the primal energy. This energy is expanding outwards. This way these vibrations may not lead to something contrastive and that's where the requirement of formatting of space is arises. The formatting part is responsibility of Brahma, it is for him to see how it expands. We will drive this inference from the nature of galaxies. Astronomers believe that some galaxies have spiral arms because galaxies rotate or spin around a central axis. A spiral galaxy's rotation, or spin, bends the waves into spirals. Stars pass through the wave as they orbit the galaxy center. Stellar systems rotate around the central star. Satellites rotate around the planets. The electrons rotate around nucleus and quarks also have spin. Therefore, the rotation, spin and polarization etc are the inherent characteristic of these waves. Some of these may be induces by the curved space in which they are directed to travel forming the patterns of constructive and destructive interference.

The constructive and destructive interference forming the beats have formed the various types of attributes of waves such as frequency, amplitude, polarization, phase, direction of propagation etc etc. Such interactions may have taken place over millions of years and further led to formation of detectable waves, which further gave rise to elementary subatomic particles. As the wavelets multiplied, entangles hit the speed of light they became heavier and turned in to smaller elementary unstable particles and at times stable subatomic particles. Subatomic particles formed nucleus and orbital particles together formed the first element hydrogen. **The amount of energy released in an nuclear fusion when two hydrogen atoms form a helium one is the energy which was used in forming the sub atomic particles which get destroyed (converted back to energy) as a result of fusion.** Similar conversion also applied to nuclear fission. There may be nuclear fission which may release more energy than nuclear fusion too. It all depends on the number of smaller particles releasing the energy. Therefore, we can imagine how much creative effort has been applied in creating a smallest sub atomic particle. Using the equation $E=MC^2$, we

can find out how much energy is released in conversion of matter in energy and if we calculate backwards, we know that how much vibration energy has created the tiny piece of matter.

Why do we need to understand that Vibration (Energy/ Matter) is a separate dimension is because at any point in space the dimension of Vibration (Energy/ Matter) can take a value of zero to infinity (such as in core of a Black Hole).

The attributes of these primal waves change at every stage of interaction with other similar waveforms. At every new stage these waves behave differently and correlating further ahead when waves start getting characteristics of particles, the nature of particles and rules governing their interaction change. For example, the interaction of quarks is different from interaction of subatomic particles, nuclear particles, atoms, molecules, metals, non metals, hydrocarbons, the they for crystals, forces of adhesion and cohesion, compound and mixtures, asteroids, stars, planets, star systems, constellations, galaxies etc.....at every stage you witness different laws. These laws are laws/ attributes of Maya and these attributes change from one level to the other.

Fundamental Dimensions

Dimension is a measurable extent of a particular kind. From the classical 4 dimensions of space time, we have 6 dimensions in the order of their precedence; Consciousness, 3 dimensions of Space, time and the Vibration (energy/ matter).

Consciousness is a separate dimension, it is unique. It indicates the sentience or intelligence and or ability to control itself and its surroundings. Without it no intelligence can ever originate or exist in the universe. The dimension of consciousness can be understood by drawing analogy to capacity of an artificial intelligence or ability of a computer to make number of computations per second.

The dimension of the Vibration (Energy/ Matter) is a significant formal dimension. Energy and matter are single dimension with dual nature (wave and particle). The nature containing energy and matter is absolutely different than consciousness. Consciousness has created nature through the basic vibrations. Lets us take analogy of a hardware computer engineer trying to read an encrypted software program physically residing in a solid state drive using material tools. In classical mechanics, space and time are different categories and refer to absolute space and time. The conception of the world currently is four-dimensional. The dimension of a mathematical space (or object) is informally defined as the minimum number of coordinates needed to specify any point within it. The dimension may start from absolute zero, any relative position and may run to infinity. The amount of matter contained in a unit 3D space is variable and similarly the amount of energy contained in 3D space is a variable. Two stars of same volume may be at different stage of evolution and may contain different mass and different energy levels.

The vibration can be zero only at the center of Universe from where it expanded. The constructive interference has filled the space with energy and matter but where did the destructive interference go? Not all wavelets find a buddy and so they keep spreading in their infinitesimally small forms outwards. **These wavelets, waves, particles which are leftover of**

continuous creation continue to travel the space can be perceived as dark energy. The space may contain aether or dark energy.

The dimension of time is most perplexing. The speed of time is different in different reference frames. While many science fiction authors portrayed reverse time travel (going back to the past) but as per the proposed theory it is not a possibility. The time flow may be reversed but events will continue in progressive fashion. What was done can not be undone it can change and take any other alternate form.

The Principles of Illusion

The First Illusion: The Beginning of a Continuous Process

Vibration is energy. It has some characteristics as we understand them today. These are amplitude, frequency, speed, polarization etc etc. The 'etc' may contain some more attributes that we may find out in due course of time. If two Vibrations of same type exactly opposite in phase are combined together, the vibrations will absorb each other (cancel out each other). Can the same process be done in reverse? If we can solve this riddle, we can create sustained energy source and solve the entire energy crisis on the earth. The consciousness having the ultimate intelligence solved this riddle and created a number (values of n varying from 0 to ∞) of anti-phase antipodal waves with 'Sankalpa' a sustained purposeful thought and that too out of nothing. The dimension of consciousness gave way to the dimension of energy. These waves (energy) spread out in all directions (Omni-directional). This is termed as illusion or Maya. It's being there without being there.

The Second Illusion and so on: Vibration forms and Energy forms Matter

The first principle formed the vibration out of nothing and this principle forms the particle out of the vibration. Einstein derived that $e = mc^2$. On the most basic level, the equation says that energy and mass (matter) are interchangeable; they are different forms of the same thing. Under the right conditions, energy can become mass, **and vice versa**. We humans don't see them that way - how can a beam of light and a walnut, say, be different forms of the same thing? - but Nature does. [5]

Let's assume that these vibrations were passed through a curved rotator of space-time and began to overlap each other to form beats (constructive and destructive interferences). These beats further strengthened the waves and altered some of their characteristics. This process was continued till these waves achieved certain amplitude and attained a definite speed called C (Speed of light) and as the wave hit this speed due to the inherent characteristics of speed of light (universal constant as described in the Theory of relativity), the time for the wavelet gets dilated, and length contracts and mass is extended to infinity.

Since there was no mass yet and waves had hit the speed C , the mass began to arise. Such wavelets further passed thru curved space time and started spinning, bumping in to each other on the way to outer space. And these wavelets started combining in random fashions to form various

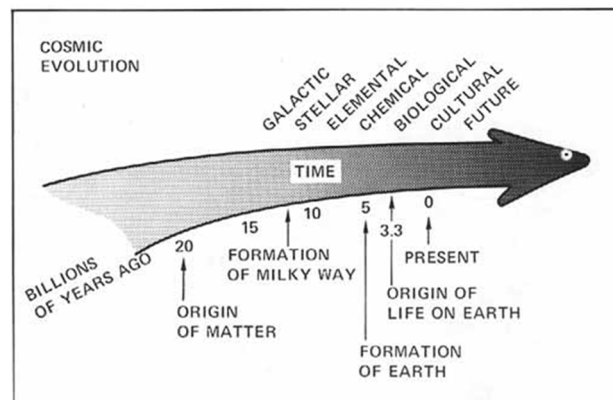
different type of waves and smallest of particles in the beginning were temporary, these integrated and disintegrated spontaneously. Slowly these wavelets began to gather more wavelets and getting superimposed, entangled with each other forming smallest of sustainable particles. As these particles were fusion of many wavelets in n number of permutations and combinations, started to gain mass, they slowed down. In this fashion, initial vibrations formed the various types of particles having similar and dissimilar characteristics.

The Standard Model of particles describes three of the four fundamental forces in nature; only gravity remains unexplained. In the Standard Model, a force is described as an exchange of bosons between the objects affected, such as a photon for the electromagnetic force and a gluon for the strong interaction. Those particles are called force carriers or messenger particles.

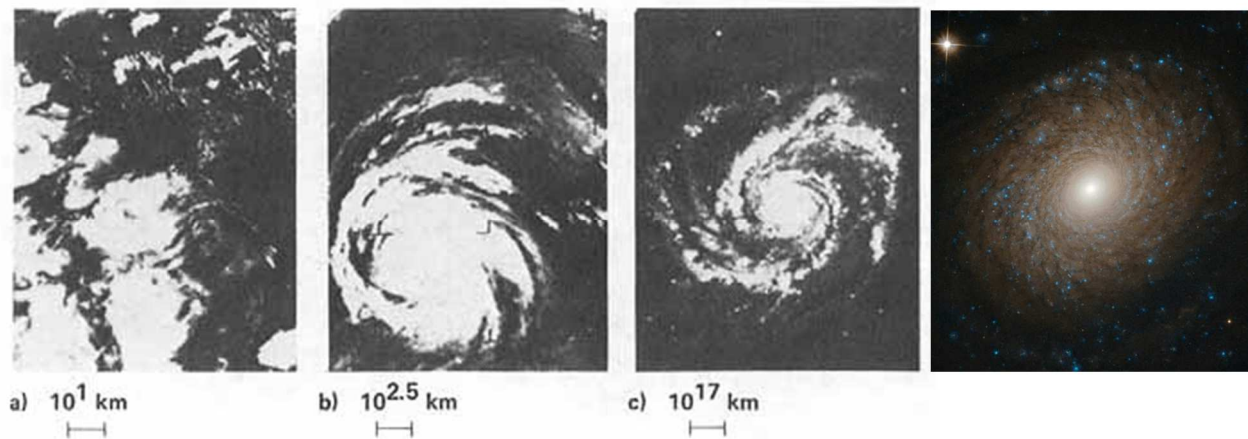
Let's assume these combinations reached the level of sub atomic particles we know today (as of above table) and further evolved in neutron, proton and electrons. They went on to formation of elements, smaller and heavier. As this dust became so that no more fusion was now possible and collisions were the only way. Atoms, molecules, chemical and physical reactions took over.

The result of moving of these waves through space time curve was gaining of spin and rotational characteristics and charge of elementary particles and the sub particles. This characteristic further extended in helical galaxies, curved motion of stars and planets. Even in a universe which is expanding, it may not be expanding radically outwards but matter may be moving tangentially and expanding (as in a helix). The timeline of creation of universe has passed through the Radiation Era containing Planck epoch, great unified epoch, inflationary epoch, electro weak epoch, Quark epoch, Hadron epoch, Leptons and Nuclear epoch. Thereafter the Matter Era containing Atomic Epoch, Stellar epoch and Galactic epoch.

As per NASA, the history of the Universe can be viewed in another way, one that follows a more linear time scale. Figure below shows the arrow of time, along which are marked several important developments in the history of the Universe. Known popularly as the scenario of cosmic evolution, it links the development of galaxies, stars, heavy elements, life, intelligence, technology,...



Diagrammatic representation of the scenario of cosmic evolution



Consciousness has created energy and hence matter through the basic vibrations. Due to this fact, there is integrity and intelligence in smallest of particle and biggest of star. It is indicated from the code of design of the initial vibration. In which ways the vibrations interacted and then accelerated, formed quarks, unstable particles, elementary and subatomic particles etc. The atom has a nucleus; the star systems for example, as solar system have a central star. The galaxies have central black hole. There are heavier objects in the centre trying to balance the rest of the environment. A quick look at the images of galaxies above should reflect on the expending helical arms like motion of galaxies; it is the further enhancement/ transformation of initial motion of the primal vibration and the manner in which it was created.

At present, matter and energy are best understood in terms of the kinematics and interactions of elementary particles. To date, physics has reduced the laws governing the behavior and interaction of all known forms of matter and energy to a small set of fundamental laws and theories. A major goal of physics is to find the "common ground" that would unite all of these theories into one integrated theory of everything, of which all the other known laws would be special cases, and from which the behavior of all matter and energy could be derived (at least in principle).[6] At each different stage of vibration in a manner of creation of matter where the basic set of laws change is a new illusion. For example, electromagnetic waves have similar properties and governed by a set of rules. Interaction of quarks, interaction sub atomic particles, atoms, molecules, compounds, mixtures, material, bigger heavenly objects, stars, black holes, galaxies etc have different set of rules for different levels and stages. There are 96 such laws for different stages and can be called principles of illusion or the veils of Maya.

Big Bang and Black Holes

Astronomers presently have found that the 13.8 billion years age of the universe is younger than some of the stars it contains. A star which is relatively near to Earth, HD 140283, which appears to be 14.5 billion years old. Dr Matthews, a member of the UK's Royal Astronomical Society,

said recent measurements of the cosmic background radiation left over after the Big Bang very precisely show the universe to be 13.8 billion years, plus or minus about 20 million years. But in 2013, measurements suggested HD 140283 - dubbed the 'Methuselah star'[8]. Astronomers have also discovered a set of 39 galaxies which were unseen till now. These are billions of light years away. The point here is distance billions of light years can be travelled on at the speed of light, the matter travels much slower and even if we are travelling far away from these (expanding universe) it will take us many times these billions of years making the universe much older [9].

Georges Henri Joseph Édouard Lemaître who originated the big bang theory was a Jesuit trained Belgian Catholic priest, mathematician, astronomer, and professor of physics at the Catholic University of Louvain. He was the first to identify that the recession of nearby galaxies can be explained by a theory of an expanding universe, which was observationally confirmed soon afterwards by Edwin Hubble. He was the first to derive what is now known as Hubble's law, or the Hubble-Lemaître law, and made the first estimation of what is now called the Hubble constant, which he published in 1927, two years before Hubble's article. Lemaître also proposed what later became known as the "Big Bang theory" of the origin of the universe, initially calling it the "hypothesis of the primeval atom"[10].

The first title of research topic 'Hypothesis of the Primeval Atom' was absolutely correct. The theory (originated from Greek theōria 'contemplation, speculation', from theōros 'spectator') was about inversion of a Black Hole. What happens in a Black hole, it will continue to accumulate matter as per some universal law and a stage will be reached when the inversion will take place and the black hole will now turn in to white hole. Why it is known as white hole is just because of inversion and it is no longer a hole. It is throwing up radiations, dark matter, quarks, sub atomic particles, atoms and other forms of matter. Therefore, Big Bang is giving birth to a sub universe or galaxy and not the universe as a whole. Not only because of the time but also because big bang needs matter (primeval atom) to commence with (in whatever tiny and compressed form) and expand as described in the theory.

Conclusions

The research methods used in this article are: (1) Theological inferences, Inspiration from Vedas and research on internet, correlation, contemplation and meditation. The foremost conclusion is that the universe is still creating from the centre and the continuous vibration (which created the wave) is still on. Therefore, where can we find the newest of matter is in the area which is closer to the center? The results of the paper are as follows:

- (a) The evolution of universe is not from Big Bang but continuous. Bing Bang could only be the transformation of local universe or a galaxy.
- (b) That the evolution of universe started from absolute zero.

- (c) That the principles of Maya (Illusion) can be seen in formation of the wave from naught and formation of elementary particles from waves because of constant of speed of light.
- (d) That there are six basic dimensions namely; the first of consciousness, the three of space, fifth the time, and sixth arising out of the primal vibration (creating energy and matter).
- (e) The universe is not moving radically outwards from its center but moving tangentially outwards from its center.

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