

Corrections to
‘Energy Theory of Matter & Cosmology’
&
‘Foundation of Theory of Everything: Non-living and
Living Things’

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Consequent upon showing the fallacy of the adopted paradigm of physics an alternative paradigm of physics emerges. These articles are concerned with the basic model of physics under the alternative paradigm of physics according to which space is finite, absolute & filled up with ether, the electric dipoles on the base substance which has been named as ‘energy’ unlike the meaning as applies in the adopted main-stream physics; time is emergent & relative, depending upon the motion of the object/observer with respect to the absolute reference frame of ether at rest, matter is emergent from different electric dipoles with base substance of ‘energy’ and light/radiation is the vibrations of the charge on the electric dipoles of ether which propagates in the medium of ether in the form of longitudinal wave motion. During the process of development of the alternative model of physics changes in the basic model of physics proposed under these two articles had to be incorporated. Besides there were some errors in the printed version of these two articles which are corrected herein for record.

Energy Theory of Matter & Cosmology

i) *The abstract of the article [1] is correctly written as under: -*

A new theory ‘Energy Theory of Matter & Cosmology’, as an alternative theory, is proposed which could explain all the problems with different theories of physics, the main cause of which is space–time concept and resultantly the Big Bang Theory fails. Since it is established that the basic building substance of matter is ‘energy’ and it has to be under the influence of the Universal Creator this energy is converted into the matter. Energy is the name given to the basic substance of which the matter is made up of unlike the meaning as applies in the adopted main-stream physics. During the process of conversion of energy into particles, the particles attained high velocities and collisions of the particles started. These particles in the process of fusion emit radiation which finally have

taken the form of Cosmic Background Radiation and under the influence of the conditions created by the Universal Creator and electromagnetic forces in different forms atoms, mainly hydrogen, started forming. Then these atoms under the influence of the gravitation force, which also being an electromagnetic force, started clustering and thereby stars and other astronomical bodies came into existence.

ii) Section: - 'Problems with the present Theories of Cosmology'.

On left side of page 943 following sentence

In the twentieth century, the theories of cosmology appeared (Big Bang Theory & Hoyle's Steady State Theory)

is replaced by

In the twentieth century Big Bang Theory & Hoyle's Steady State Theory appeared as the theories of cosmology.

iii) *On the right side of page 943 following sentence*

The most serious problems with the Steady State Theory are that the theory does not take the origin and mechanism of formation of matter into account and secondly the theory presumes space and so that universe to be expanding.

is replaced by

The most serious problems with the Steady State Theory are that the theory does not define the mechanism of formation of matter and the stability of the universe while the gravitational force is acting between the matter, is not explained.

iv) *On the left side of page 944 following sentence*

Since there is no alternative theory to the Big Bang Theory, it was virtually adopted despite the fact that it has far more serious problems than any other theory the history of cosmology.

is replaced by

Since there is no alternative theory to the Big Bang Theory, it was virtually adopted despite the fact that it has far more serious problems than any other theory in the history of cosmology.

Section: - Fundamental Problem Identified

v) **On the left side of page 946 following table**

<i>Theory</i>	<i>Matter</i>	<i>Time</i>	<i>Space</i>
<i>Big Bang</i>	<i>Absolute</i>	<i>Absolute</i>	<i>Emergent</i>
<i>Steady State</i>	<i>Emergent</i>	<i>Absolute</i>	<i>Emergent</i>
<i>Energy</i>	<i>Emergent</i>	<i>Emergent</i>	<i>Absolute</i>

is replaced by

Theory	Matter	Time	Space
Big Bang	Emergent	Emergent/Relative	Emergent
Steady State	Emergent	Absolute	Absolute
Energy	Emergent	Emergent/Relative	Absolute

Section: - Introduction to 'Energy Theory of Matter & Cosmology'

vi) **On the right side of page 946 following sentence**

Both the 'energies' that is energy type (ii) and energy type (iii) have sub-types.

is replaced by

Energy type (ii) has sub-types whereas energy type (iii) is a single type of uniform energy.

vii) **On the right side of page 946 following figures 1 & 2**

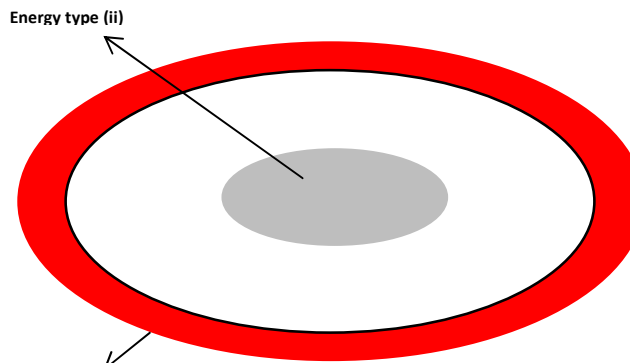


Figure 1

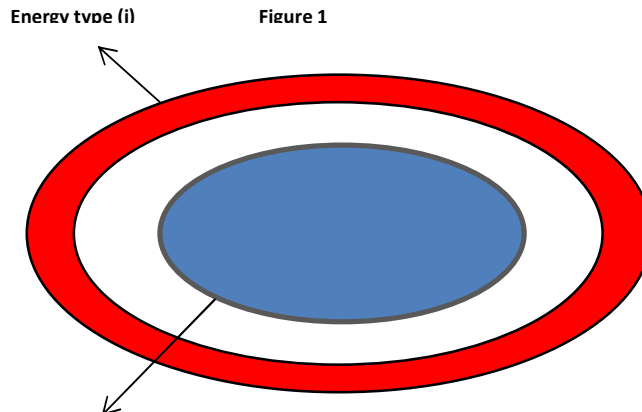
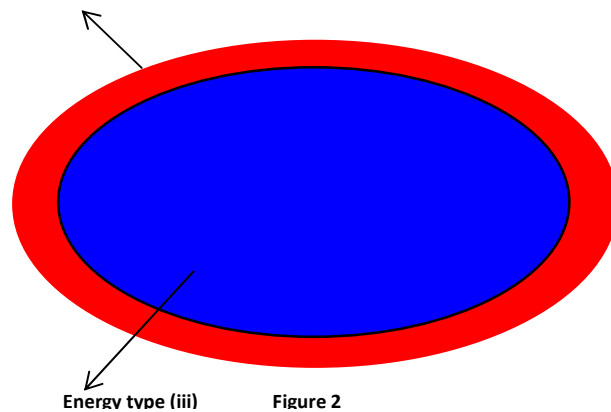
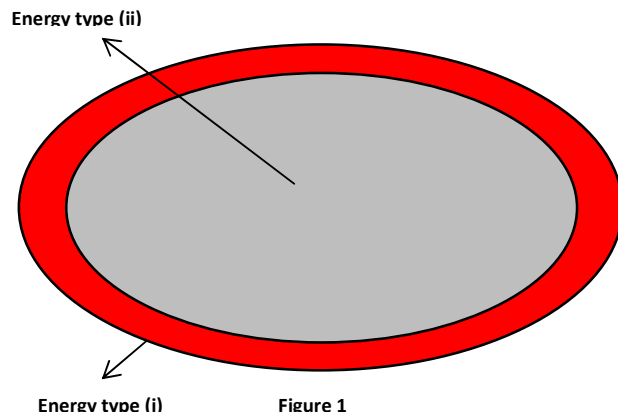


Figure 2

are replaced by



viii) **On the left & right side of page 947 following para**

Since it is established that the basic building substance of matter is energy and it has to under the influence of a force field, this energy is converted into the matter. The force field has to originate from somewhere. The force field originated from the peripheral energy type (i) and with the initiation of the force field energy type (ii) was converted into matter particles namely protons, neutrons, electrons, neutrinos and other particles. During the process of conversion of energy into the particles, the particles attained high energies and collisions of the particles started. These particles in the process of fusion emit radiation which finally takes the form of cosmic background radiation as under the influence of said force field, weak nuclear force, strong nuclear force and electromagnetic forces the atoms started forming. Then these atoms under the influence of gravitational force started clustering and hereby planets, stars and other astronomical bodies came into existence. In order to conserve the momentum these clustered atoms started moving in all possible directions and further clustering of planets & stars also followed. Further clustering resulted in formation of star system like solar system. This was followed by further clustering of star systems into galaxies. However the movement of all

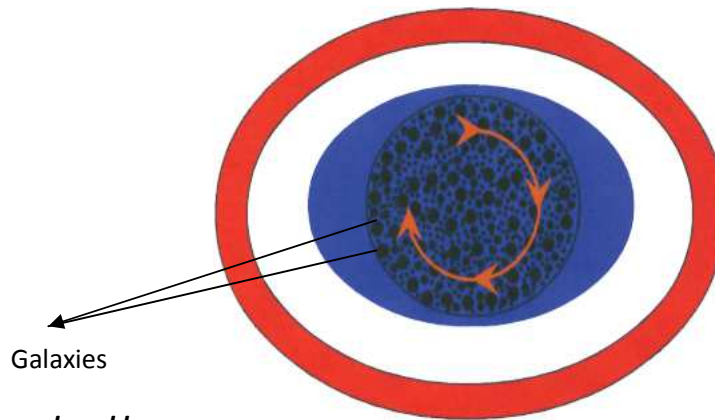
planets, stars and astronomical bodies continued. It would be worthwhile to mention here that some atoms could not cluster and continued to be in the space and subsequently as & when suitable gravitational force conditions prevail these atoms also cluster to form the star systems and as such the process of star formation continues with time and star formation take place even at present. Subsequently the clustering of stars took place for the formation of galaxies. In order that galaxies are stable, stars within the galaxies started revolving and in order that all astronomical systems are stable the whole universal matter in the form of galaxies are rotating. In the process of rotation of all the universal matter, very gradual expansion is taking place resultantly galaxies are receding which accounts for Hubble observation of red-shift of the visible spectrum of radiation being emitted by the galaxies. The fact that the universal matter is expanding but not the space, is the basic and fundamental problem of Big Bang Theory.

is replaced by

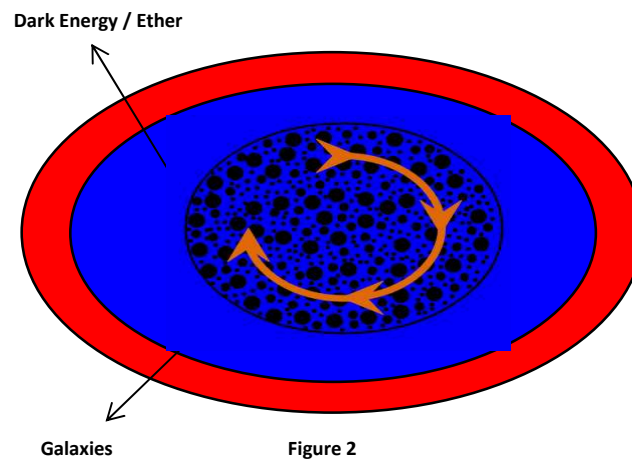
Since it is established that the basic building substance of matter is energy and it has to be under the influence of the Universal Creator, this energy is converted into matter particles mainly electrons, protons & may be some other particles. During the process of conversion of energy into particles, the particles attained high velocities and collisions of these particles started. These particles especially electrons & protons in the process of fusion emit radiation which finally takes the form of Cosmic Background Radiation. Under the conditions created by the Universal Creator and due to the electromagnetic forces, all the forces of nature being electromagnetic forces, atoms mainly hydrogen started forming.

Under the influence of gravitational force, which being the electromagnetic force due to the curl of the energy type (iii), clustering of atoms took place resulting in the formation of stars & astronomical objects. In order to conserve the momentum these clustered atoms started moving in all possible directions and further clustering of stars & astronomical objects followed which resulted in the formation of galaxies. In order that galaxies are stable, stars within the galaxies started revolving around the centre of galaxies. In order that galaxies and all astronomical systems are stable the universal matter in the form of galaxies are rotating. In the process of rotation of all universal matter, very gradual expansion is taking place resultantly galaxies are receding which accounts for Hubble observations of red-shift of the visible spectrum of the radiation being emitted by the galaxies. The fact that the universal matter is expanding but not the space, is the basic & fundamental problem of Big Bang Theory.

ix) **On left side of page 947 following figure 3**



is replaced by



x) **On right side of page 947 following sentence**

The failure of converting mass particles into energy by making them to collide at very high speeds is due to the fact that unless and until the force field is withdrawn not a single stable particle could be converted into energy.

is replace by

The failure of converting mass particles into energy by making them to collide at very high speeds is due to the fact that unless & until the conditions created by Universal Creator are withdrawn not a single particle could be converted into energy.

xi) **On right side of page 947 the para**

Finally the universe will be restored to the original form as and when the force field is withdrawn by the peripheral energy type (i)

is replaced by

Finally the universe will be restored to the original form as and when the conditions for existence of matter are withdrawn by the peripheral energy type (i), the Universal Creator.

Foundation of Theory of Everything: Non-living and living Things

Section: - Introduction

xii) *On right side of page 955 following sentence*

With theories of relativity and the Quantum mechanics in the present form become wrong concepts, the dependent mathematics and theories were manipulated suit to the wrong theories.

is replaced by

With theories of relativity and Quantum Mechanics in the present form incorrect concepts and theories were put forward which were mathematically manipulated to suit the theoretical & experimental results.

xiii) *On left side of page 956 following sentence*

Whereas, Einstein considered space as emergent and time to be relative but absolute but both of them were not correct.

is replaced by

Whereas Einstein considered space as emergent and time to be relative & emergent and he also interconnected time with space but both of them were not correct.

xiv) *On right side of page 956 following sentence*

Voigt arrived at the same transformations which later-on is very well known Lorentz transformation.

is replaced by

Voigt arrived at a similar transformation which later-on is very well known as Lorentz transformation but the modification introduced by Lorentz has been the main reason for evolution of fundamentally incorrect physics.

xv) *On left side of page 957 following sentence*

Philosophically this transformation converts absolute space into an emergent concept whereas the absolute nature of time is retained but converts time as a relative concept.

is replaced by

Philosophically this transformation converts absolute space into an emergent concept whereas time is relative, interconnected with space and so it is also emergent.

Section: - Derivation of transformation between two coordinates systems in relative uniform motion

xvi) On left & right side of page 958 following sentence

For receding condition V is positive the distance seems to be contracted whereas for approaching condition distance seems to have increased or elongates

is replaced by

For receding condition V is positive; the distance is to be taken to be contracted whereas for approaching condition distance is to be taken as elongated because of the time dilation as distances are computed in terms of time taken by the light pulse.

xvii) On left & right side of page 959 following paras

Now if we consider the experiment in the reference frame in which earth is at rest, which implies that this reference frame is in relative motion with respect to the ether at rest frame of reference with the velocity; say V. Due to the motion of the earth the reference frame in which earth is at rest, the time frame is different according to the equation (7). Now consider the Fig.2 of the article 'Ultimate Proof of Energy Theory of Matter & Cosmology' (Mohammad Shafiq Khan, 2010c). If t_{L1} and t_{L2} is the time taken by the light to travel in the two arms, going and coming back, of the Michelson Morley experiment in the ether at rest frame of reference; then since the velocity of the light or electromagnetic radiation is invariable; the time taken is

$$t_{L1} = t_{L2} = \frac{2l}{c}$$

In the earth at rest frame of reference, since earth is in motion with respect to the ether so the time frame of the earth at rest frame of reference is different. The time t'_{L1} in the earth at rest frame of reference is equal to

$$t'_{L1} = \gamma t_{L1} \quad \text{and} \quad t'_{L2} = \gamma t_{L2}$$

and since $t_{L1} = \frac{2l}{c}$ and the velocity of light being the same

$$t'_{L1} = \frac{2l'}{c} \quad t'_{L2} = \frac{2l'}{c}$$

$$\text{So } \gamma t_{L1} = \frac{2l'}{c} \quad \text{and } \gamma t_{L2} = \frac{2l'}{c}$$

$$\gamma \frac{2l}{c} = \frac{2l'}{c} \quad \text{Hence } l' = \gamma l$$

This is exactly as derived in the graphical method in equation (10) (for two arms could be different depending upon the component of velocity of earth along the two arms of the Michelson-Morley experiment). Thus, as the consequence of the difference in time frames of two reference frames in uniform relative motion, we have to adopt length contraction or elongation for the mathematical computations. Though the length is the same but in the moving frame of reference we have to adopt a contracted or elongated length depending upon the direction of motion of the earth.

is to be treated as deleted.

xviii) On the left side of page 960 following sentence

Since through this article the concept of existence of the medium, the ether is being revived and according the starting point has to be the Maxwell's field equations which are as under:

is replaced by

Since through this article the concept of existence of the medium, the ether, is being revived accordingly the starting point has to be the Maxwell's field equations, though the alternative theory proposed under this article does not accept field as real, which are as under:

xix) From left side of page 963 following paras & equations

This should show that electromagnetic wave equation is invariant under this transformation.

Now taking the equation (12) in the two reference frames

$$\nabla_{r'} \cdot \mathbf{B}' = \nabla_r \cdot \mathbf{B} = 0$$

$$\text{Since } \mathbf{B}' = \mathbf{B}'_o e^{i(k_1 \hat{c} \cdot r' - w_1 t')}$$

$$\text{and } \mathbf{B} = \mathbf{B}_o e^{i(k_o \hat{c} \cdot r - w_o t)}$$

$$\nabla_{r'} \cdot \mathbf{B}'_o e^{i(k_1 \hat{c} \cdot r' - w_1 t')} = \nabla_r \cdot \mathbf{B}_o e^{i(k_o \hat{c} \cdot r - w_o t)}$$

$$\text{So } ik_1 \mathbf{B}' = ik_o \mathbf{B}$$

$$\text{Hence } k_1 \mathbf{B}' = k_o \mathbf{B} \dots \dots \dots (42)$$

Now taking the wave equation (36)

$$c^2 \frac{\partial^2 \mathbf{B}'}{\partial r'^2} = \frac{\partial^2 \mathbf{B}'}{\partial t'^2}$$

From equation (42) we have $\mathbf{B}' = \frac{k_o}{k_1} \mathbf{B}$ and applying this to the right side and applying the transformation.

$$c^2 \frac{\partial^2 \mathbf{B}'}{\partial r'^2} = \frac{1}{\gamma^2} \frac{\partial^2}{\partial t^2} \left\{ \frac{k_o}{k_1} \mathbf{B} \right\}$$

$$c^2 \frac{\partial^2 \mathbf{B}'}{\partial r'^2} = \frac{k_o}{k_1 \gamma^2} \frac{\partial^2}{\partial t^2} \mathbf{B}$$

$$-c^2 k_1^2 \mathbf{B}' = -\frac{k_o}{k_1 \gamma^2} \omega_o^2 \mathbf{B}$$

Applying equation (42) back on right side

$$-c^2 k_1^2 \mathbf{B}' = -\frac{k_o}{k_1 \gamma^2} \omega_o^2 \frac{k_1}{k_o} \mathbf{B}'$$

Hence

$$c^2 k_1^2 = \frac{\omega_o^2}{\gamma^2}$$

Since $\omega_o = k_o c$

$$c^2 k_1^2 = \frac{k_o^2 c^2}{\gamma^2}$$

Hence $\gamma k_1 = k_o$(43)

$$k_1 = \left(1 + \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c} \right) k_o$$
.....(44)

Since $k_1 = \frac{2\pi}{\nu_1}$ $k_o = \frac{2\pi}{\nu_o}$

Hence $\nu_1 = \frac{\nu_o}{1 + \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c}}$ (45)

Under receding condition $\hat{\mathbf{c}} \cdot \mathbf{v}$ is +ve; so observed frequency in moving reference frame is

$$\nu_1 = \frac{\nu_o}{1 + \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c}}$$

and wavelength is $\lambda_1 = \left(1 + \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c} \right) \lambda_o$

Thus under the receding condition frequency of the electromagnetic radiation is observed to be reduced and the observed wave length of the electromagnetic radiation is increased which means red-shifting.

Under approaching condition $\hat{\mathbf{c}} \cdot \mathbf{v}$ is $-ve$

We have

$$\nu_1 = \frac{\nu_o}{1 - \left| \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c} \right|}$$

and $\lambda_1 = \left(1 - \left| \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c} \right| \right) \lambda_o$

Thus, under approaching condition the observed frequency is increased and the observed wavelength of the electromagnetic radiation is reduced which means blue-shifting.

is replaced by

However adoption of equation (41) would require clarification. In the equation (39)

$$\mathbf{r}' = \mathbf{r} - \gamma \mathbf{v} t$$

\mathbf{r}' and \mathbf{r} denotes the vector coordinates of the light pulse in two coordinate systems. Now let the point light source emit the light in all directions or in the direction of motion of the moving observer and let $\hat{\mathbf{c}}$ be the unit directional vector of the light

$$\hat{\mathbf{c}} \cdot \mathbf{r}' = \hat{\mathbf{c}} \cdot \mathbf{r} - \gamma \hat{\mathbf{c}} \cdot \mathbf{v} t$$

So $\mathbf{r}' = \mathbf{r} - \gamma \hat{\mathbf{c}} \cdot \mathbf{v} t$

Now $\partial \mathbf{r}' = \partial \mathbf{r} - \gamma \hat{\mathbf{c}} \cdot \mathbf{v} \partial t$ (42)

In the reference frame S which is at rest with respect to ether

$$\mathbf{r} = c t$$

$$\partial \mathbf{r} = c \partial t$$

Equation (42) could be written as

$$\partial \mathbf{r}' = \partial \mathbf{r} - \gamma \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c} \partial \mathbf{r}$$

$$\partial \mathbf{r}' = \left(1 - \gamma \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c} \right) \partial \mathbf{r}$$

Since $\gamma = \frac{1}{1 + \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c}}$

$$\partial_{\mathbf{r}'} = \left(1 - \frac{\frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c}}{1 + \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c}} \right) \partial_{\mathbf{r}}$$

$$\partial_{\mathbf{r}'} = \frac{1}{1 + \frac{\hat{\mathbf{c}} \cdot \mathbf{v}}{c}} \partial_{\mathbf{r}}$$

$$\partial_{\mathbf{r}'} = \gamma \partial_{\mathbf{r}}$$

or $\mathbf{r}' = \gamma \mathbf{r}$ in so far as light wave is concerned

The transformation equation (38), (39), (40) & (42) is the general transformation and may be called the Khan Transformation which is valid for all wave-equations. The purpose of derivation of this transformation using electromagnetic wave-equation; which in turn was derived from Maxwell's field equations; without presuming space as vacuum but space having charge density; was to arrive at the following equations as the consequence of equations (29) & (30)

$$\nabla^2 \rho = \frac{1}{c^2} \frac{\partial^2 \rho}{\partial t^2} \dots \dots \dots (43)$$

$$\nabla^2 \mathbf{J} = \frac{1}{c^2} \frac{\partial^2 \mathbf{J}}{\partial t^2} \dots \dots \dots (44)$$

These are two main equations on the basis of which foundation of the 'Theory of Everything' has been laid and these equations contain the secrets of physical nature of the universe. These equations reveal that there is some charge in the space the vibrations of which propagate at the velocity of light which actually constitute the light/radiation. 'Theory of Everything' does not accept the existence of fields because the physicality of the fields as in the main-stream physics is undefined. The attempt of Maxwell in the article 'On physical lines of force' to define the medium of ether was destined to fail because he had adopted absolute time and incorrect nature of matter as composed of charged particles. The fact that Maxwell's field equations are valid is because these equations contain the aspect of electromagnetism under which objects with changing magnetic & electric polarity induce electric & magnetic effects respectively.

Having presumed the constancy of velocity of light irrespective of the motion of the source and the observer, it has been shown that space is absolute and only time is relative depending upon the motion of the

observer with respect to the absolute reference frame of ether at rest. Having reintroduced the ether on the basis of equation (43) & (44) it is proposed that ether consists of electric dipoles of equal and opposite charge on either sides of the substance which is named as 'energy'. Under the proposed theory 'energy' is basically a substance which has entirely different meaning than the meaning of this word in the adopted main-stream physics. The vibrations of the charge on the substance called 'energy' would give rise of the wave motion of the charge density and current density (as understood in main-stream physics) which wave-motion propagates at the velocity of light. Thus light is a wave-motion due to vibrations of charge on the electric dipoles of ether and like sound waves it is also longitudinal wave-motion but unlike sound waves it is not due to the physical motion of the air particles but it is because of the vibrations of the charge on either sides of the electric dipoles. The comparison of the light and the sound has been described because sound is heard by the observer due to pressure changes caused by the wave-motion of air particles whereas in case of the light the observer would experience the effects of light in the form of magnetic effects as the changing electric polarity of electric dipoles would induce magnetic effects. (This being the reason that under the proposed theory matter has been proposed to be consisting of magnetic dipoles as light is absorbed/emitted as the magnetic effect. There is another more important reason as to why matter has to be made up of magnetic dipoles. Nuclear forces could not be explained as the electromagnetic force if matter is treated as electric dipoles. The nature of spin of the magnetic dipoles of electrons & protons and the electric interactions between these particles would define the nature of nuclear forces.) This differentiation has to be kept in mind while deriving the Doppler Effect and accordingly using the phase velocity to derive the Doppler Effect is justified in case of sound but in case of light phase velocity could not be used to derive the Doppler Effect.

The derivation of the Doppler Effect could be explained in the simple manner by presuming that there is a source of light emitting the monochromatic light which produces the vibrations of the charge in the electric dipoles of ether and these vibrations propagate at a velocity c in the ether at rest frame of reference. Now these vibrations of charge on electric dipoles would be experienced as magnetic effect by the observers/objects in their time frame. Now if N number of vibrations pass through a point in a period to time t in the ether at rest frame of reference; thus the frequency of the light in this frame of reference is

$$\frac{N}{t} = \nu_o$$

Now space being absolute at the same point the moving observer/object would experience the vibrations in its time frame; if t' is the time frame of

the moving observer then frequency as experienced by the moving observer would be $\nu' = \frac{N}{t'}$

Since $t' = \gamma t$

Whereas $\gamma = \frac{1}{1 + \frac{\hat{c} \cdot \mathbf{v}}{c}}$

So $\nu' = \nu_{\partial} \left(1 + \frac{\hat{c} \cdot \mathbf{v}}{c} \right)$

Since $\nu' \lambda' = c = \nu_{\partial} \lambda_o$

Hence

$$\lambda' = \frac{\lambda_o}{1 + \frac{\hat{c} \cdot \mathbf{v}}{c}} \dots \dots \dots (45)$$

xx) On the left side of page 964 the para (e)

When the observations about physical quantity is carried out with the help of electromagnetic radiation and because of the nature of the electromagnetic phenomenon which involves both space as well as time and as the time frame of the moving frame of reference is different so we have to allow for the contraction or elongation of the space depending upon the direction of motion and the velocity of the moving frame of reference for the mathematical computations.

is to be deleted

xxi) On the left side of page 964 the para (i)

i. The invariability of velocity of electromagnetic radiation or light irrespective of the relative motion of the source and the observer.

is replaced by

i. The invariability of velocity of electromagnetic radiation or light irrespective of the relative motion of the source and the observer, the condition laid down by wave-equation of light/radiation, is confirmed as there is change in both wave-length and frequency of the light/radiation in the moving frame of reference.

xxii) On the right side of page 964 the para

In fact once the electromagnetic radiation is emitted by a source then the medium defines the velocity of the electromagnetic radiation and in case of ether as the medium the permittivity ϵ_0 and permeability μ_0 defines the velocity of the electromagnetic radiation. Secondly the nature has balanced the difference in the time frames in such a manner that the velocity of the electromagnetic radiation with respect to the observer on the moving reference frames remains unchanged. There, then is the secret of existence of the luminiferous ether as the cause of invariability of the velocity of light or electromagnetic radiation and that the light or radiation is the electromagnetic phenomenon

The para is deleted.

xxiii) On the right side of page 965 following paras and equations

Thus the wave length as observed by observer in the absolute reference frame at O would be

$$\lambda'' = \left(1 + \frac{V_{x''}}{c}\right) \lambda_o \dots\dots\dots (46)$$

So
$$\lambda_o = \frac{\lambda''}{1 + \frac{V_{x''}}{c}} \dots\dots\dots (47)$$

Now if there is an observer of the same electromagnetic radiation on the reference frame S' which has the outward velocity component $V_{x'}$ (where $V_{x''} > V_{x'}$; receding condition) then the observer will observe the wavelength in accordance with his time frame with respect to the medium. Since this is also a receding condition so observer on S' will see the radiation with the wavelength

$$\lambda' = \left(1 + \frac{V_{x'}}{c}\right) \lambda_o$$

Since λ_o is given in (47)

$$\lambda' = \frac{\left(1 + \frac{V_{x'}}{c}\right)}{1 + \frac{V_{x''}}{c}} \lambda''$$

are replaced by

From equation (45) we have

$$\lambda'' = \frac{\lambda_o}{1 + \frac{V_{x'}}{c}} \dots\dots\dots (46)$$

So
$$\lambda_o = \left(1 + \frac{V_{x'}}{c}\right) \lambda'' \dots\dots\dots (47)$$

Now if there is an observer of the same electromagnetic radiation on the reference frame S' whose outward velocity component is $V_{x'}$ (where $V_{x''} > V_{x'}$; receding condition) then the observer will observe the wave-length in accordance with his time frame with respect to the medium. Since this is also a receding condition so observer on S' will see the radiation with the wave-length

$$\lambda' = \frac{\lambda_o}{1 + \frac{V_{x'}}{c}}$$

Since λ_o is given by equation (47)

$$\lambda' = \frac{c + V_{x'}}{c + V_{x'}} \lambda''$$

Under receding condition $V_{x''} > V_{x'}$

$\lambda' > \lambda''$ Hence there has to be red shifting

Under approaching condition $V_{x''} < V_{x'}$

$\lambda' < \lambda''$ Hence there has to be blue shifting

Section: - Foundation of Theory of Everything (Non-living Things)

xxiv) *On the left side of last para on page 967*

The Maxwell

is replaced by

Maxwell

xxv) *On the right side of page 967 following sentences*

Thus energy which constitutes the matter, in the form of electric dipole strings due to the scalar field (the scalar field is mentioned to differentiate the mechanism from force; as there has to be yet unknown electromagnetic phenomenon through which spin could be imparted to the electric dipoles; though this theory does not recognize the concept of fields but since no work capacity is transferred as such the words of scalar field represents the mechanism of transformation of electric dipoles in to magnetic dipoles) started spinning and thereby the electric dipole strings were converted into magnetic dipoles and a large amount of work capacity was released which these magnetic dipoles retained in the form of motion; which presently is being known as kinetic energy; with respect to the ether, the electric dipoles. The electric dipoles of the ether were not affected by

the scalar field could be due to the reason that the electric dipoles of the ether are having more content of energy than the energy of the electric dipoles of which the matter is made up of; and the scalar field not having that much of intensity to be in a position to make the electric dipoles of the ether to spin.

are replaced by

Thus energy which constitutes the matter, in the form of electric dipole strings due to the intervention of the Universal Creator started spinning and thereby the electric dipole strings were converted into magnetic dipoles and a large amount of work capacity was released which these magnetic dipoles retained in the form of motion; which is known as kinetic energy in the main-stream physics. The electric dipoles of ether were not affected by the intervention of Universal Creator could be due to the reason that the electric dipoles of the ether are having a different structure and not in a position to retain the spin.

xxvi) On left side of page 970 following paras & equations.

Now since the medium has its time frame; the medium will experience the magnetic field with respect to its time frame.

Applying the formula which was derived under equation (42)

$$k_1 \mathbf{B}' = k_0 \mathbf{B} \dots \dots \dots (42)$$

It was also shown

$$\gamma k_1 = k_0 \dots \dots \dots (43)$$

Hence $k_1 \mathbf{B}' = \gamma k_1 \mathbf{B}$

So $\mathbf{B}' = \gamma \mathbf{B}$ $\mathbf{B} = \frac{\mathbf{B}'}{\gamma}$ thus

$$\frac{\partial \mathbf{B}}{\partial t} = \frac{\partial}{\partial t} \left(\frac{\mathbf{B}'}{\gamma} \right)$$

is replaced by

Now since the medium has its time frame; the medium will experience the magnetic polarity of the object with respect to its time frame. Let B' be the magnetic polarity (B has been assigned different meaning here as compared to this symbol as adopted in Maxwell's equations) in his time frame and the magnetic effect as experienced by the medium be B. So

$$\frac{\partial \mathbf{B}}{\partial t} = \frac{\partial \mathbf{B}'}{\partial t'}$$

Since $t' = \gamma t$

$$\frac{\partial \mathbf{B}}{\partial t} = \frac{\partial}{\partial t} \left(\frac{\mathbf{B}'}{\gamma} \right)$$

xxvii) On the left side of the page 971 following sentence

Naturally, the time frame of the medium and the star would be changing and the medium would experience the electric field.

is replaced by

Naturally, the time frame of the medium and the stars would be different and $\frac{\mathbf{B}'}{c} \frac{\partial^2 r}{\partial t^2}$ will be having a defined value and the medium will experience the electric effect in the form of curl of the electric dipoles. Accordingly, the electric effect will be transmitted to the planet in the form of magnetic force due to the difference of time frames between the medium and the planet as the result of Maxell's study and thus there will be gravitational force between the stars & planets.

xxviii) On the right side of page 971, following sentence

The simple conclusion is that the gravitational force is the electromagnetic force and the gravitation is because of the recessional acceleration and the continuous change of time frames of the moving reference frames.

is replaced by

The simple conclusion is that the gravitational force is the electromagnetic force because of the recessional acceleration, the $\frac{\partial^2 r}{\partial t^2}$ factor.

xxix) On the right side of page 971 & 972 following sentence

Both the dipoles are of equal longitudinal dimensions carrying equal quantity of charged entities on either side from the centre of the strings. Both types of dipoles have capability of equal strength of magnetic field and work capacity.

is replaced by

Both the dipoles carry equal quantities of charged entities on either side from the centre of the strings.

xxx) On the left side of page 972 following sentence

These collisions resulted in the entanglement of the strings such that both the strings are in the state of spin while as the negative charged side of the electron string coincides with the positive charged side of the proton and net result is that a neutron is produced which has spin but has no magnetic polarity and in this process the magnetic work capacity of the proton and the electron is dissipated in the form of electromagnetic radiation.

is replaced by

These collisions result in entanglement of the strings such that both the strings are in a state of spin while as the negative charged side of the electron string coincides with the positive side of the proton string or vice versa and the net result is that a neutron is produced which has considerably reduced magnetic polarity and in the process the magnetic work capacity is dissipated in the form of electromagnetic radiation.

xxxi) On the left side of page 972 following sentence

Since the electrons & protons have a high momentum in the opposite directions, the particles comes so close that instead of the magnetic polarity electric field of the electron and the proton starts interacting resulting in the superposition of the negative charge of the electron superimposes on the positive charge of the proton and vice-versa. This results in the loss of magnetic work capacity of the electron as well as the proton; the magnetic field of electron and the proton changes with respect to time during the small period of time of the collision and this develops the electric field in the medium, the ether the electric dipoles, as the result of which the electric dipoles of the medium start vibrating and the vibrations are transmitted in the medium.

is replaced by

Since electrons & protons have a high velocity in the opposite directions the particles come so close that instead of the magnetic interaction electric interaction takes place due to the superimposition of the negative charged side of electron & positive charged side of proton or vice versa. During the small period of time of collision the magnetic polarity of the so formed neutron is reduced compared to the sum of magnetic polarity of electron & the proton and this reduction in magnetic polarity over a small period of time induces electric effect in the medium of ether, the electric dipoles, thereby the magnetic work capacity is dissipated. This dissipation of magnetic work capacity to medium of ether, the electric dipoles, takes place in the form of vibrations of the charge of the electric dipoles of ether

which propagates in the form of wave-motion with a defined velocity depending upon the electromagnetic properties of the ether.

xxxii) On the left side of page 972 following sentences & para

This vibrations of the electric dipoles create an electromagnetic field wave in the medium as the result of which a wave of an alternating current passes in the medium. This is perfectly in accordance with the Maxwell's field equations as these equations are valid for the absolute reference frame of the medium, the ether. Now we could discuss the importance of deriving the equation (29) and (30)

$$\nabla^2 \rho - \mu_o \epsilon_o \frac{\partial^2 \rho}{\partial t^2} = 0 \dots \dots \dots (29)$$

$$\nabla^2 \mathbf{J} - \epsilon_o \mu_o \frac{\partial^2 \mathbf{J}}{\partial t^2} = 0 \dots \dots \dots (30)$$

The above two equations were derived in order to prove that the charge density also adopts the characteristics of a wave motion over the area over which the electric and magnetic field of the electromagnetic wave motion is produced. The relevant equation is equation (30) because it is this equation which defines as to what the electromagnetic radiation in true sense means. This equation defines the electromagnetic radiation as the package of alternating current (not necessarily sinusoidal) which carries the work capacity equal to the loss of magnetic work capacity of the electron and the proton. This package of alternating current is in the form of the vibrations of the electric dipoles of the ether which vibrations propagates in the ether with the velocity defined by the medium as $\frac{1}{\sqrt{\epsilon_o \mu_o}} = c$

are deleted

xxxiii) On the right side of page 972 the para

The package of the wave motion of the alternating current is having the direction of the radiation and is perpendicular to the direction of the electric and magnetic fields of the electromagnetic wave motion. This package carries the work capacity which is being received by the matter, the magnetic dipoles.

is deleted

Concepts of Mass, Energy & Emergent Time

xxxiv) *On the left side of page 975 following sentence*

As the matter moves in the ether the electric dipoles of the ether are displaced resultantly the electric field is developed which in turn produces the magnetic field and the magnetic dipoles of the matter experiences a magnetic field which would oppose the motion of the matter as per the equation (13) and (14)

is replaced by

As the matter moves in the ether the electric dipoles of ether are displaced resultantly a changing electric effect is induced thereby a reverse magnetic effect is produced giving rise to the inertia to the matter which depends upon the velocity of moving matter.

xxxv) *On right side of page 975 & 976 following sentence*

As already stated if

$\frac{\partial^2 r}{\partial t^2} > 0$ *then there will be attraction, but if*

$\frac{\partial^2 r}{\partial t^2} < 0$ *then there will be repulsion. But when the recessional acceleration would start reducing and as and when*

$\frac{\partial^2 r}{\partial t^2} = 0$

the gravitational attraction would be zero and the linear velocity of the star would force the star to recede again and thereby the attraction will set in again. Thus this could be generalized that no approaching condition can prevail. Now this will apply within the galaxies and also between the galaxies such that no approaching conditions prevail and stars will adjust due to the resultant gravitational forces and only receding conditions prevail between stars within the galaxies, between galaxies and between stars of different galaxies. As the result of this Hubble has observed only the red-shifting in respect of all the stars and galaxies. It is because of this nature of gravitation that astronomical bodies would not collide in the universe; however there is only one possibility that neutron star may collide.

is replaced by

The gravitational force could be attractive or repulsive depending upon the polarity of the star & planets and the recessional motion of the both. The recessional acceleration of the star, the $\frac{\partial^2 r}{\partial t^2}$ factor, would define the curl

of the electric dipoles and the motion of the planet would also create the curl of the electric dipoles and the planets will adopt the path of zero curl assuming the polarity of the star & planet are aligned in the same direction due to the conditions created by the Universal Creator. It is because of the attractive as well as repulsive nature of gravitational force the celestial objects in the universe do not collide and the universe is stable. With Newton's gravitational force only as an attractive force and assuming the space as absolute, as this paradigm of space was adopted at the time by Newton, the question of even considering the stability of universe is absurd. This fact was overlooked by physicists for more than two and a half centuries. Even under the General Theory of relativity, without assuming space is absurdly expanding without any reason, the stability of the universe is out of question.

xxxvi) On the left side of page 976 following sentence

Since the universal creator has the capability of creating the scalar fields by which electromagnetic properties of the energies could be changed as such the time has to be an emergent concept.

is replaced by

Since the Universal Creator has the capability of changing the electromagnetic properties including depriving the electric dipoles of ether and magnetic dipoles of matter of electromagnetic properties as such time has to be an emergent concept.

xxxvii) On the right side of page 977 following sentence

Thus, the Universal Creator consists of the energy which has no electromagnetic properties and is powerful enough to create the scalar field due to which the electric dipoles of matter were converted into the magnetic dipoles.

is replaced by

Thus the Universal Creator consists of the energy, the substance, which has no electromagnetic properties and is powerful enough to impart spin to electric dipoles of matter so as to convert these into magnetic dipoles.

Section: - Discussion

xxxviii) On the left side of page 978 following para

As already stated in the article 'Ultimate Proof of Theory of Matter & Cosmology'[11] that the energy which constitutes the matter has actually not two but three natures. The energy has the wave nature, particle nature and the pure energy nature. We could make studies of the energy in wave

nature or particle nature but it would be very difficult to understand the real true nature of the energy. Since matter moves in the ether, the Luminiferous Energy and the movement of the matter in the Luminiferous Energy is an electromagnetic phenomenon which obeys the wave characteristics as such the matter also adopts the wave nature in its motion. The electromagnetic radiation and all small magnetic dipoles up to the molecular level display the properties of wave nature and for objects with bigger dimensions the wavelength is much higher for detection of the wave nature.

Is deleted

xxxix) *On the left side of page 978 following sentence.*

The magnetic dipoles of electrons and protons along with the neutrons, latter having no magnetic polarity, while forming atoms loose the magnetic energy because thereby atoms become magnetic multipoles and the net effect is that atoms act as weak magnetic dipoles, much less than the sum total of the individual magnetic dipoles of electrons and protons in the atom

is replaced by

The magnetic dipoles of electrons, protons and neutrons while forming atoms loose the magnetic energy thereby atoms become magnetic multipoles and the net effect is that atoms act as weaker magnetic dipoles, much less than the sum total of the individual magnetic dipoles of electrons, protons & neutrons.

xxxx) *On right side of page 978 following sentence*

As soon as the scalar field; responsible for conversion of electric dipoles of the matter into the magnetic dipoles; is withdrawn by the universal creator the movement including the spinning motion of all the magnetic dipoles in the form of electrons, protons, neutrons and atoms would stop and the work capacity in the form of linear velocity of these magnetic dipoles will be utilized for conversion of these magnetic dipoles into electric dipoles and all the cosmic background radiation & other electromagnetic radiations will be absorbed back by these electric dipoles to be in the state in which the universe was before the matter was created

Is replaced by

As soon as the conditions created by the Universal Creator for stability of the universe are withdrawn the magnetic dipoles of matter will be deprived of the spin and all the Cosmic Background Radiation will be

absorbed back and these magnetic dipoles will be restored to the electric dipoles to be in the state in which the universe was before the universal matter was created.

Section: - Fundamentals of Theory of Everything (Living Things) (this sectional name is to be incorporated)

xxxxi) *On left side of page 980 following sentence*

However there could be just one objection by the present day atheistic scientists because they seem to have the notion that this information is stored in the brain but the reply would be that the brain has the capability of reading the stored information; the information being stored in the energy meant for the purpose in respect of the human beings.

Is replaced by

However there could be just one objection from atheistic scientists because they seem to have the notion that this information is stored in the brain but the reply would be that brain cells do suffer from apoptosis and are not regenerated and if the information is stored in brain then the information could not be withdrawn from dead cells but humans do remember the past events when the people are old. The information is stored in this energy and the brain withdraws the information from this energy.

xxxxii) *On left side of page 980 following is to be added after the para which ends up with words growth, reproduction and behavior.*

However in case of animals very limited working energy of such nature is provided which could help the animals in recognizing other animals, places and things.

Conclusion

These articles clearly show the fallacies of the adopted paradigm of physical sciences as the result of which humans were unable to know the physical reality as well as the truth about existence. The physical universe is simply the electromagnetic phenomena due to the charge. Humans neither can know what is charge nor the substance, the energy, which carries the charge. The physical universe has apparently four constituents namely space, time, matter and light/radiation but there are other constituents of the universe which though perceivable are not visible. Phenomenon of life is not purely a physical phenomenon but it is the activity of both physical & incorporeal entities whereas conscience is not

the physical phenomenon at all. Unfortunately scientists, both physical & biological, considered these as the physical phenomena consequently humanity was misled. Phenomenon of life has to be studied physically, biologically as well as philosophically whereas conscience could only be studied philosophically as herein is defined the purpose of human life.

References

1. Mohammad Shafiq Khan (2010) Energy Theory of Matter & Cosmology *Published by Indian J.Sc. & Technol 3 (8)*, 943-974 available at www.indjst.org.
2. Mohammad Shafiq Khan (2010) Foundation of Theory of Everything; Non-living & Living Things published by *Indian J.Sc. & Technol 3 (9 & 10)* 955-981