

## **Investigation of unusual activities of the universe concerning solar and terrestrial context**

### **ABSTRACT**

A controlled thermonuclear fusion reaction of the Sun appears to be a remarkable evidence of the existence of a planet in the outer space. A microwave background of radiation of a planet in the outer space subjected to white dwarf plasma becomes relevant to the case of a temperature at  $0^{\circ}\text{C}$ . Since singularity collapse concerning a Hot Big Bang, the edge of space- time fails. Irregular change of galaxies deals with a vacuum to exhibit spiral radio galaxies permeated by magnetic pressure. The expansion of universe can be extended rigorously to raise its temperature with the growing of a magnetic field as the singularity collapses at the point at infinity and the universe will become fall into ice as the temperature becomes true. Indeed, the configuration of the Sun leads to supernova explosion concerning the abundance of helium to become a neutron star.

**Key words** : Hot Big Bang, White dwarf plasma, resonant level, spiral radio galaxy, space- time

## 1. Introduction:

“The configuration of the Sun is associated with a thermonuclear reactor in the presence of a magnetic mirror with decisive importance to a radiofrequency accelerator. A magnetic mirror with the Sun leads to a controlled thermonuclear fusion reaction at the resonant level and a radiofrequency accelerator with the Sun is subjected to a driving force to produce radio emission so that the emission of the ultrarelativistic electron becomes gyrating in a magnetic field. This situation reveals that radio emission is a synchrotron radiation. Since the Sun is exposed to a vacuum, a radio signal from the Sun is propagated into the atmosphere and is taken into account by X-emission. It is worth mentioning that radio emission in a vacuum communicates these radio observations to become very hottest, indeed relativistic, plasma in the universe. Plasma-induced laser radiation with the Sun is subjected to a magnetic mirror in the presence of a charged oscillator with the decisive importance to a driving force. The influence of a magnetic field with the Sun communicates laser radiation at the resonant level as the magnetic field grows towards the resonant level”. [8] Ghosh [1] studied “the magnetohydrodynamic flow in a rotating environment subject to a forced oscillation in the presence of an inclined magnetic field showing the influence of the dynamo context of the Sun at the resonant level. Representing the influence of a magnetic field it is stated that resonance exhibits a controlled thermonuclear fusion reaction of the Sun in the presence of a radiofrequency accelerator permeated by a magnetic mirror due to a driving force to produce a laser rainbow resulting from an oscilloscope with reference to the growing of a magnetic field at the resonant level. X-ray emission is the best way of communicating laser rainbow color in such a way that the synchronization of ultraviolet radiation and X-emission at the shorter wave length produces rainbow color in the presence of an oscilloscope and the importance of bright blue color leads to the existence of X-emission”. “The representation of X-ray waves in the universe deals with X-ray photons if a radiofrequency accelerator is applied to the Sun so that the frictional layer of the Sun breaks down and the Sun is exposed to a vacuum. In the presence of a radiofrequency accelerator with the Sun, radio emission determines irregular fluctuation of the electron in a vacuum to produce a solar storm so that the magnetic field changes its direction abruptly from the central region. In this situation, radio emission becomes a

synchronization of X-ray waves in the universe and a synchronized electromagnetic wave (X-ray photon) is liberated from the Sun". [8]

## 2. Astrophysical note with mathematical identity:

The formation of the universe deals with neutron stars to expedite the origin of a galaxy where many of the stars and planets that raise their temperature due to thermonuclear flashes originated from the Sun. A thermonuclear reaction of a neutron star experiences  $\gamma$  - radiation to raise its temperature and the neutron star grows to form an explosion to become a galaxy of stars attracted by gravitation. A supernova explosion of a giant star inside the spiral radio galaxies deals with gravitational attraction formed by collision to become a white dwarf. A gravitational pull in a vacuum exerts its influence on spiral radio galaxies during the formation of the white dwarf to produce a resonant line with a decisive importance to ultraviolet radiation inside the spiral radio galaxies and the distance of the stars becomes larger and larger to carry ultrarelativistic electron concerning to radio emission. It is more convincing to say that a black hole burst can lead to a gravitational attraction followed by X - emission due to thermonuclear flashes. Although the existence of ultraviolet radiation and X - emission exerts its influence on the irregular change of galaxies propelled by  $E \gg m c^2$  to become X ray bursts of shorter wave lengths. This justification comes into true for the existence of X - ray photons if a radiofrequency accelerator is applied to the Sun. This leads to a vacuum with a significant effect of a pressure gradient subjected to a driving force. The excitation of X - ray photon in a vacuum communicates the swollen oceanic circulation with lighter density of multiphoton and the absorption of photon is trapped by X - emission in a vacuum. However, nuclear bombardment with ionized hydrogen to transform into an abundance of helium with the Sun is remarkable evidence of an ionized plasma with the alliance of X - ray photon. Consideration can take place of a superfluid ( ${}^4\text{He}_2$ ) helium burning to become the fifth state of matter so that a controlled thermonuclear fusion reaction of the Sun may be regarded as the fifth state of matter to deal with outer space. "A remarkable investigation on a controlled thermonuclear fusion reaction of the Sun at the resonant level" has been carried out by Ghosh and Pop [2- 3], Ghosh [4 ], Ghosh et. al [5 - 6], Ghosh and Beg [7] and Ghosh [8 - 9].

“In the light of an angular frequency of oscillation, it is rigorously stated that the resonant condition  $\omega > \frac{1}{2} \cos \omega T (16 K^4 - M^4 \sin^4 \theta)^{1/2}$  corresponds to a forcing wave to excite the natural frequency when the phase angle  $\omega T = \pi/2$ . This proves resonance when the phase angle  $\omega T = \pi/2$  so that the excitation frequency becomes relevant to  $\omega > 0$ . In this context, a magnetic mirror with the Sun will generate an excitation frequency to produce laser radiation due to a driving force in the presence of a charged oscillator. This situation reveals that laser radiation is so intense at the transition when the phase angle  $\omega T = \pi/2$  at resonance and the reflection occurs in the region as the magnetic field increases abruptly in strength”. [8] “Strictly speaking that a magnetic mirror with the Sun is the representation of an inclined magnetic field to produce the dynamo mechanism of the Sun at the resonant level. The excitation frequency  $\omega > 0$  due to a driving force permeated by a radiofrequency accelerator leads to a turbulent dynamo mechanism of the Sun in the presence of a magnetic mirror. The stability of a magnetohydrodynamic system of the Sun is subjected to the simultaneous action of Coriolis and Lorentz force whereas the effect of rotation ( $K^2$ ) and magnetic force ( $M^2$ ) are separately stabilizing, the two effects can work against each other in such a way that the flow is stable under the action of rotation alone and the flow becomes unstable when the magnetic field is present. It is worth mentioning that the resonant condition  $\omega > \frac{1}{2} \cos \omega T (16 K^4 - M^4 \sin^4 \theta)^{1/2}$  leads to a turbulent dynamo mechanism of the Sun where  $K^2$  to the rotation parameter which is the reciprocal of Ekman number,  $M^2$  is the Hartmann number (magnetic force) and  $\theta$  is the angle of inclination of a magnetic field with the positive direction of the axis of rotation. In the presence of a charged oscillator with the Sun, the turbulent dynamo mechanism corresponds to an oscillatory character of the Sun at the resonant level. The trigger large velocity fluctuation communicates with the growing of a magnetic field at the resonant level to exhibit a turbulent dynamo context of the sun if the Coriolis force and magnetic force are comparable in magnitude.

Representing the charged particle in the presence of a radiofrequency accelerator with the Sun, the formation of electron cloud particle exerts its influence of a controlled thermonuclear fusion reaction of the Sun permeated by a magnetic mirror. In turn, a controlled thermonuclear fusion reaction of the Sun is an expedition of outer space to communicate microwave background of radiation to find out the living universe and the civilization may turn into a new dimension of space era. The expansion of a universe leads to irregular change of galaxies to form white dwarf plasma due to a Hot Big Bang that may come into true for finding a new universe at  $0^{\circ}\text{C}$ . Indeed, the influence of a magnetic field is a new era of space science". [8]

Since resonance exhibits a controlled thermonuclear fusion reaction of the Sun permeated by a magnetic mirror with a decisive importance to a radiofrequency accelerator in taking into account the growth of a magnetic field at the resonant level; laser radiation is so intense at the transition to producing multiphoton and,ultraviolet radiation and binary X – rays are emitted from the Sun as the air breaks down ( Vacuum ) to form an ionized plasma. This implicates the situation of a rotating environment to deal with resonant condition  $\omega > \frac{1}{2} \cos \omega T ( 16 K^4 - M^4 \sin^4 \theta )^{1/2}$  that a laser pulse radiation corresponds to a driving force with reference to phase angle  $\omega T = \pi/2$  at resonance to exerts its influence of a driving frequency  $\omega > 0$ . The mentioned resonant condition may be reasonably assumed as a turbulent dynamo action of the universe. It is important to note that the growth of a magnetic field towards the resonant level is determined by a magnetic mirror with the Sun in the presence of an inclined magnetic field so that reflection occurs at resonance to produce plasma-induced laser radiation concerning thermonuclear reaction about a radiofrequency accelerator. A charge oscillator takes place at the resonant level with a controlled thermonuclear fusion reaction to produce laser radiation of resonance fluorescence. Nevertheless, a radiofrequency accelerator with the Sun is the determination of a controlled thermonuclear fusion reaction under a force of gravity in a vacuum permeated by a magnetic mirror. In this context, a force of gravity accelerates the entire universal system what he called the “plasma universe”. In taking into account radio emission in a vacuum in the presence of a radiofrequency accelerator with the Sun that becomes an activation of X – emission to act as an elastic wave. Thus X – ray wave represents the swollen Oceanic circulation of lighter density. Radiation can not escape

from zero gravity because of force of gravity is strong with reference to an angular frequency of oscillation to deal with angular momentum what he called space pressure with reference to gravitational pull attracted by the Sun. A Hot Big Bang of the universe deals with the irregular change of galaxies subject to a forced oscillation if a radiofrequency accelerator is applied to the Sun. A supernova explosion of a giant star to form a neutron star that raises its temperature due to thermonuclear flashes inside the spiral radio galaxies to form an alternative configuration of the Sun. With reference to the differential rotation of the Sun caused by a forced oscillation it is worth noting that irregular changes of galaxies of different wave lengths may come true for distant galaxies so that Sun can move with different wave lengths to find out a new universe. Since the differential rotation of the Sun affects the formation of galaxies of a different wave length, the Sun is in an appreciable position to enter into a different galaxy and the light wave is a deterministic approach of the Sun to change its direction by increasing differential rotation to accelerate the speed of light.

Since singularity collapses due to a Hot Big Bang, the growth of a magnetic field can lead to the expansion of a universe with irregular space time intervals with  $E \gg mc^2$ . If we consider a sphere of volume  $\frac{4}{3} \pi r^3$  then radius  $r$  is very very large and it crosses the elastic limit by increasing its volume and the radius of curvature is spiral due to magnetic pressure. This situation reveals that frictional stress at the boundary of the solar corona breaks down. Suppose a glass of water with finite volume and if we consider frictionless fluid then singularity has become a significant effect of a finite volume. A thermometer takes place of rise in temperature to cross the elastic limit of high temperature. Therefore, temperature depends on frictional force to initiate the thermonuclear reaction of the Sun. Viscosity depends on pressure due to a driving force with a decisive importance to resonance. The growth of a magnetic field expresses the failure of the edge of space- time so that the concept of Stephen Howkins [ 10 ] becomes wrong.

### 3. Mathematical identity of the temperature flow :

Unsteady flow of a viscous incompressible fluid occupying a semi- infinite region of space bounded by an infinite horizontal moving hot spherical boundary with reference to indirect natural convection by way of an induced pressure gradient, is considered. To choose the co-ordinate system in such a way that  $x'$ -axis is taken along the sphere and the  $y'$ - axis is normal to it. At the leading edge of the sphere, the temperature of the surrounding fluid is  $T'$  so that, at the static field, there is a pressure distribution with a gradient  $\frac{\partial p}{\partial y'} = \rho g$  . The induced pressure gradient lies in  $x'$ -direction to the origin of the flow parallel to the spherical boundary. It is considered that all fluid properties are constant except the influence of density variation in the body force term. The radiation heat flux in the  $x'$ - direction is considered negligible in comparison to the  $y'$ - direction.

The boundary layer equations under Boussinesq approximation with regard to indirect natural convection can take the form

$$\frac{\partial u'}{\partial x'} + \frac{\partial v'}{\partial y'} = 0, \quad (1)$$

$$\frac{\partial u'}{\partial t'} + u' \frac{\partial u'}{\partial x'} + v' \frac{\partial u'}{\partial y'} = - \frac{l}{\rho} \frac{\partial p}{\partial x'} + \nu \frac{\partial^2 u'}{\partial y'^2} \quad (2)$$

$$0 = - \frac{l}{\rho} \frac{\partial p}{\partial y'} + \rho g \beta (T' - T'_\infty) \quad (3)$$

$$\frac{\partial T'}{\partial t'} + u' \frac{\partial T'}{\partial x'} + v' \frac{\partial T'}{\partial y'} = \frac{K}{\rho C_p} \frac{\partial^2 T'}{\partial y'^2} \quad (4)$$

Where  $u'$ ,  $v'$ ,  $t'$ ,  $\nu$ ,  $g$ ,  $\beta$ ,  $T'$ ,  $T'_\infty$ ,  $K$ ,  $C_p$  and  $\rho$  are, respectively, the velocity component along the spherical boundary, the velocity component normal to the boundary, the time, the kinematic coefficient of viscosity, the gravitational acceleration, the coefficient of thermal expansion, the temperature of the fluid, the temperature of the fluid far away from the boundary, the thermal conductivity, the specific heat at constant pressure, the density of the fluid.

It is assumed that there is a temperature variation along the  $x'$ - direction of the semi-infinite horizontal spherical boundary. The temperature of the flow can be written as

$$T' = T'_\infty + (T'_w - T'_\infty) A x' \theta'(y) \quad (5)$$

where  $A = u_0 / \nu$

The boundary conditions are

$$\begin{aligned} u' = 0, T' = T'_\infty & \quad \text{for} \quad y' \geq 0, t' \leq 0 \\ u' = u_0, T' = T'_w & \quad \text{for} \quad y' = 0, t' > 0 \\ u' = 0, T' = T'_\infty & \quad \text{for} \quad y' \rightarrow \infty, t' > 0 \end{aligned} \quad (6)$$

Where  $T'_w$  is the temperature at the wall and  $u_0$  is the velocity of the plate.



Introducing dimensionless quantities

$$u = \frac{u'}{u_o P_x}, t = \frac{t' u_o^2}{\nu}, y = \frac{y' u_o}{\nu}, \theta' = \frac{\theta \nu}{u_o L}, \delta = \frac{x'}{L} \text{ and} \quad (7)$$

$$\theta = \frac{T' - T'_\infty}{(T'_w - T'_\infty) \delta} \text{ is the dimensionless temperature}$$

The dimensionless temperature depends on the thickness of the boundary which is comparable with the equation (5). Here, for larger thickness  $\delta$  tends to infinity it is proved that  $\theta = 0$ .

$$P_x = \frac{\nu}{\rho u_o^3} \left\{ -\frac{d}{dx} F(x') \right\} \text{ is the dimensionless pressure gradient, } Gr = \frac{g \beta N \nu^2}{u_o^4 P_x} \text{ is the}$$

Grashof number and  $Pr = \frac{\mu C_p}{K}$  is the Prandtl number.  $\delta$  is the boundary layer thickness and L is the characteristic length.

Then the dimensionless boundary conditions turn into

$$\begin{aligned} u=0, \quad \theta=0 & \quad \text{for } y \geq 0, t < 0 \\ u=1, \quad \theta=1 & \quad \text{for } y=0, t > 0 \\ u \rightarrow 0, \quad \theta \rightarrow 0 & \quad \text{for } y \rightarrow \infty, t > 0 \end{aligned} \quad (8)$$

With reference to the equation of the temperature flow given by (5) the dimensionless temperature is valid for finite thickness  $\delta = 1$  where temperature of the wall  $T_w = \text{Constant}$ . On the other hand, if  $\delta$  tends to infinity then the length of its growth is very large and the radius is very large so that the universe can be expanded extensively and the

temperature becomes zero at the point at infinity. In this situation, singularity collapses at the point of infinity.

#### **4. Results and Discussions**

Since boundary layer thickness depends on the velocity field it reveals that the singularity collapse at the point of infinity. This indicates that an increase of a boundary layer thickness takes place of lighter density to increase in volume offering a resistance of a large viscosity. The point of inflection determines the curvature of a spherical boundary. In the case of a frictional fluid under Zero gravity, the curvature of a spherical boundary is determined by the pressure gradient and viscosity initiates the thermal boundary of a curvature profile. A grand unified theory corresponds to an angular momentum to exhibit curvature of a velocity profile. If singularity collapses the region, then the radius of curvature is spiral in nature with zero tangent as defined by a vacuum. Irregular change of galaxies in a vacuum deal with outer space to become a realistic approach to a spiral radio galaxy due to a magnetic pressure and a new finding of a planet has become a real significance at  $0^{\circ}\text{c}$ . Indeed, a microwave background of radiation does exist on the planet in outer space with reference to white dwarf plasma. White dwarf becomes a real significance at  $0^{\circ}\text{c}$  so that singularity collapses at the point at infinity. It is worth mentioning that the expansion of universe can be extended rigorously to raise its temperature with the growth of a magnetic field as the singularity collapses at the point at infinity and the universe will become fall into ice as the temperature becomes true. Indeed, the configuration of the Sun leads to a supernova explosion concerning the abundance of helium to become a neutron star.

#### **Conclusion**

A controlled thermonuclear fusion reaction of the Sun permeated by a magnetic mirror with a decisive importance to an inclined magnetic field at the resonance level when a

forced oscillation is taken into account. The expansion of universe is subjected to the growth of a magnetic field towards the resonant level so that singularity collapses at the point of infinity and the radius of curvature is spiral in nature.

### **Acknowledgement**

Author wishes to express his sincere thanks to reviewers for their valuable comments in the preparation of revised version.

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