

# Space Time Equivalence-A New Concept

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**Abstract-** ‘Heart of the God model of cosmology’ says that the four dimensional ‘space -time’ is like a fluid of density  $4.776335 \times 10^{60} \text{ Kg/m}^3$ . The paper entitled ‘New cosmological constants’ introduced the “Siva’s constant-K” with a value  $2.0275 \times 10^2 \text{ sqmt/sec}$ . Combined analysis of both the concepts concluded that space and time are interchangeable and quantitatively ‘t’ seconds of time can be converted in to a space with a radius of  $\sqrt[3]{(4\pi t^3)}$  meters. This physical concept is use full for physicists, cosmologists and researchers working on Grand Unification Theories and Consciousness research.

**Index Terms-** Cosmology, Double Relativity Effect, Film theory of universe, Heart of God space, Siva’s Constant time

## I. INTRODUCTION

This article elaborates a new scientific concept step by step introduction of ‘Heart of God model of the universe’ and Siva’s Constant ‘K’ which are the sources to build this new concept.

Further analysis of space time with expanding universe theory and with the application of ‘Double Relativity’, ‘Film theory of the Universe’ [2] has been introduced. ‘Film theory of the Universe’ is a model which elaborates ‘space-time’ and path of each point of this expanding universe with time. It says that the universe is made-up of several films which will change for every  $7.68 \times 10^{-44}$  seconds [2]. Thus continuity will be maintained in this universe. All the events of this universe are the consequence of this change of film just like a movie in which films will change for every 16 seconds.

With the help of this ‘Film theory’ and ‘Double Relativity’, four dimensional space time has been defined as a three dimensional fluid with certain density. The visible matter in this universe is floating on the surface of that fluid. The two dimensional surface area of the three dimensional ‘space time fluid’ is the three-dimensional space of this universe.

With the help of above concepts, the ‘The Heart of the God model of the universe’ [1] has been introduced. It elaborated concepts of space and time much more profoundly. Thus it avoided the singularity problem of ‘Big Bang’ theory and agreed with the Big Bang in such a way that the Big Bang is a part of the ‘Steady State Theory’.

The model says-“Four dimensional ‘space- time’, is like a three-dimensional fluid of this universe. It is in almost spherical shape. It is existed as it is. It has no beginning or no ending. It fluctuates for every  $7.68 \times 10^{-44}$  sec. [1] In each fluctuation, it creates matter. Means, pumps the matter in to this universe. It is similar to a human heart which fluctuates 72 times every minute

to pump the blood. So this is called as “Heart of the God” The density of the matter it pumps is constant. The calculation of density of matter distributed is almost equal to the results of ‘Steady State Theory’. According to this theory, the matter distribution is in order of  $4.54 \times 10^{-42} \text{ kg/cum/sec}$ .

With the help of equations mentioned in the concept ‘Double Relativity Effect’ [2] the value of Siva’s constant ‘K’[3] has been calculated as  $1.164135058 \times 10^2 \text{ sqmt/sec}$ . Later it is revised as  $2.0275 \times 10^2 \text{ sqmt/sec}$ . The conceptual conclusion shows that the theoretical value of Hubble’s constant is  $5.2225746 \times 10^{-20}/\text{sec}$ . The mass of the universe has been calculated as  $6.448233042 \times 10^{48} \text{ kgs}$ .

## II. SPACE TIME EQUIVALENCE CONCEPT

As per ‘Heart of the God model’- the density of space time fluid is  $4.776335 \times 10^{60} \text{ Kg/m}^3$

As per new cosmological constants Siva’s constant ‘K’ is  $2.0275 \times 10^2 \text{ sqmt/sec}$ .

As per the definition of HEART OF GOD Model the surface area of the space time fluid is equal to the three-dimensional space of the universe.

The radius will not change but the surface area changes.

In ‘Heart of God model’ the surface area is changing and must obey Siva’s constant.

Means, if time changes, surface area will change and three-dimensional space of universe changes.

But as per ‘Heart of God model’ the space time fluid is constant in size.

It existed as it is. It will not change its size. So, we can say that the increment in surface area is decreasing its radius such that the total size is constant.

Increment in surface area of ‘Heart of God’ is expansion of space. But decrement in radius?

We know that the space time fluid is made up of space and time only. One substance is space that is increasing .so definitely the other substance is time only. This must have to decrease to compensate the other.

Thus the substance space is converting in to time and vice versa. Total space time fluid remains same.

Quantitatively-

Siva's constant 'K' is  $2.0275 \times 10^2$  sqmt/sec  
and 'r' is radius of 'Heart of God'.

Its surface area =  $4\pi r^2$

As per theory, surface area is nothing but three dimensional space .

The formula  $Vd = K$  defined for three dimensional space only.  
Where -'V' is the velocity of a point from any point in space at a distance 'd'. And the direction is towards that point.

So  $Vd = K \Rightarrow (d/t)d = K$  -- For particular film of the universe.  
Therefore  $d^2/t = K$

Let us suppose, this time is 't<sub>s</sub>' as defined by our conventional space.

So the equation can be written as  $d^2/t_s = K$

Hear both 'd' and 't' are defined by our conventional world.

As per theory -

The surface area of 'Heart of God' =  $4\pi r^2 = K$

$\Rightarrow 4\pi r^2 = K$  Where 'r' is radius of 'Heart the God'

Let us substitute 'd' as defined by our conventional space with 'r' of Heart of God

Therefore  $4\pi d^2 = d^2/t$

Here the surface area is increasing means-  $4\pi d^2$  is increasing.  
But 'd' should not increase. It is converting in to time.

To satisfy this, suppose 'd' =  $t_H$  and  $t_H$  is increasing to compensate "increment in  $4\pi d^2$ "

The equation can be written as  $4\pi t_H^2 = d^2/t_s$

Therefore  $t_H^2 \cdot t_s = d^2/4\pi$

Now we can not define two different times for "Heart of God( $t_H$ )" and "our conventional space-time( $t_s$ )"

So, let us say  $t_H = t_s = t$

$t_H^2 \cdot t_s = d^2/4\pi$

$\Rightarrow d^2 = 4\pi t^3$

Therefore  $d = \sqrt{4\pi t^3}$

Thus Quantitatively 't' seconds of time can be converted in to a space (spherical shape)with a radius of 'd' meters equivalent to  $\sqrt{4\pi t^3}$ .

## CONCLUSIONS

1. Space is a substance .Time is a substance. Space-time is a fluid with density  $4.776335 \times 10^{60}$  Kg/m<sup>3</sup>
2. Space and time can be converted in to one another forms.
3. Quantitatively 't' seconds of time can be converted in to a space (spherical shape) with a radius of 'd' meters equivalent to  $\sqrt{4\pi t^3}$ .
4. This result will be useful for researchers working in the area of Grand unification and consciousness.

## REFERENCES

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