The Ghosh model of the universe

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Abstract

In this paper, I describe my model of the universe.
The paper ends with "The End"

Introduction

Knowledge has been demanded of me of a model of the universe.
In this paper, I describe my model of the universe.

My model of the universe

A **point** is an ordered 4-tuple (x, y, z, t) where x, y and z are **the spatial co-ordinates** and t is **the time co-ordinate**.

The fundamental equations of the universe are

$$\frac{(x-\alpha)^2}{a^2} + \frac{(y-\beta)^2}{b^2} + \frac{(z-\chi)^2}{c^2} = 1$$

$$\left(\frac{\nu}{v} - 1\right) - \left(1 - \frac{\tau}{t}\right)^2 = 1$$

$$v = \frac{4}{3}\pi abc$$

where

$a > 0, b > 0, c > 0$ are **the lengths of the semi-axes of the universe**
v is **the volume of the universe**
$(\alpha, \beta, \chi, \tau)$ is **the point of importance in the universe**
ν is **the new volume of the universe**

Since one of the fundamental equations of the universe is a quadratic in t, that equation can be solved to obtain **at most 3 epochs in the universe**.

Elimination of a, b, c, α, β, and γ from
the fundamental equations of the universe yields
the auxiliary equation of the universe

$$\nu = v\left(3 - \frac{2\tau}{t} + \frac{\tau^2}{t^2}\right) \wedge t \neq 0 \wedge v \neq 0$$

The distance between two points in the universe is

$$d_{1,2} = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2 + (z_2 - z_1)^2 + (t_2 - t_1)^2}$$

where

(x_1, y_1, z_1, t_1) are the co-ordinates of point P_1
(x_2, y_2, z_2, t_2) are the co-ordinates of point P_2

Note that $d_{1,2} = d_{2,1}$

The speed of light between two non-identical points in the universe is

$$c_{1,2} = \frac{d_{1,2}}{|t_2 - t_1|} = \frac{\sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2 + (z_2 - z_1)^2 + (t_2 - t_1)^2}}{|t_2 - t_1|}$$

Note that $c_{1,2} = c_{2,1}$

The local signal broadcasted in the universe is

$$s = \ln\left(1 + \left|\frac{x - \alpha}{a}\right|\right) + \ln\left(1 + \left|\frac{y - \beta}{b}\right|\right) + \ln\left(1 + \left|\frac{z - \chi}{c}\right|\right) + \ln\left(1 + |v - \nu|\right) + \ln\left(1 + |t(t - \tau)|\right)$$

Note that if $\nu = v$ then $s = 0$ at $(\alpha, \beta, \chi, \tau)$

The End