

# The Big Bang theory contradicted by Cyanobacteria: Did Cyanobacteria of 3.5 billion years ago live near the current position of Mercury?

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**Abstract:** - Cyanobacteria that existed 3.5 billion years ago are still living today. The existence of cyanobacteria means that the present gravitational and inertia forces are almost the same as they were 3.5 billion years ago. Here, the inertia force is determined by the cumulative gravitational forces exerted by all celestial bodies in our universe. And it was reported that previous measurements of universal expansion were split between either 67 or 72 Kilometers per second per megaparsec according to the Big Bang theory. Therefore, the ratio of the old inertia force of 3.5 billion years ago to the present inertia force is 1.8 times. Because the centrifugal force of 3.5 billion years ago was 1.8 times greater, the Earth at that time had rotated near the position of Mercury.

If the Big Bang theory is correct, Cyanobacteria 3.5 billion years ago lived near the current location of Mercury. All living creatures can never live there. Therefore, the Big Bang theory is contradicted by Cyanobacteria.

**Key-Words:** Big Bang theory, Cyanobacteria, inertia force, centrifugal force, rotation radius, Mercury , expansion of universe

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## 1 Introduction

Cyanobacteria that existed 3.5 billion years ago are still living today [1]. The existence of cyanobacteria means that the present gravitational and inertia forces are almost the same as they were 3.5 billion years ago [2]. According to the Big Bang theory [3, 4], 3.5 billion years ago, the ancient Earth rotated near the position of present-day Mercury because its centrifugal force was 1.8 times greater at that time. Therefore, the Big Bang theory is contradicted by the fact that Cyanobacteria existed 3.5 billion years ago.

## 2 Position of the old Earth 3.5 billion years ago

The inertia force is determined by the cumulative gravitational forces exerted by all celestial bodies in our universe. Because the degree of gravitational force between two celestial bodies decreases with the expansion of the universe, it of inertia force decreases. Therefore "the inertia force coefficient ( $\delta$ )" is required in the Big Bang theory [5]. A relation between the old inertia force ( $oFi$ ), the present inertia force ( $pFi$ ) and the inertia force coefficient ( $\delta$ ) is

$$oFi = \delta(pFi) \quad (1)$$

And a relation between the old centrifugal force ( $oFc$ ), the present centrifugal force ( $pFc$ ) and the inertia force coefficient ( $\delta$ ) is

$$oFc = \delta(pFc) \quad (2)$$

If the universe is expanding according to the Big Bang theory, all distances between two celestial bodies in our universe 3.5 billion years ago were shorter than now. Therefore, an old inertia force ( $pFi$ ) of 3.5 billion years ago had to be very stronger than the present it. However, the cells can't subdivide in very strong gravity and inertia force [6, 7]. Furthermore, an old centrifugal force ( $oFc$ ) of 3.5 billion years ago must have been very strong because of the inertia force, if the Big Bang theory is correct. And, the strong centrifugal force of the Earth rotating around the Sun had to be equal to the gravitational force between the Earth and the Sun.

Here, the centrifugal force of 3.5 billion years ago may be precisely calculated. It was reported that previous measurements of universal expansion were split between either 67 or 72 Kilometers per second per megaparsec [8]. The length ( $l$ ) is measured with the velocity ( $v$ ) and the time ( $t$ )

$$l = vt \quad (3)$$

From Equation (1), a distance ( $Lh$ ) between two celestial bodies in the universe is

$$Lh = (v1) t \quad (4)$$

Here, "v1" is either 67 or 72 Kilometers per second per megaparasec. From Equation (4), the present distance (pLh) 13.8 billion years after the Big Bang is

$$pLh = (v1) \times 13.8 \text{ billion years} \quad (5)$$

From Equation (5), the old distance (oLh) of 3.5 billion years ago is

$$oLh = (v1) \times (13.8 - 3.5) \text{ billion years} \quad (6)$$

And Newton's gravitational equation [9] is

$$F = G \frac{Mm}{r^2} \quad (7)$$

Here, "F", "G" and "r" are respectively force, gravitational constant, and distance. And, "M" and "m" are two masses. Here, each "M" and "m" represents the mass of the Sun and the Earth. From Equations (5), (6) and (7), the ratio (Ri) of that the old inertia force to the present inertia force is

$$Ri = \frac{\frac{GmM}{\{(v1) \times (13.8 - 3.5 \text{ billion years})\}^2}}{\frac{GmM}{\{(v1) \times (13.8 \text{ billion years})\}^2}} \approx 1.8 \quad (8)$$

From Equation (8), the old inertia force coefficient (oδ) of 3.5 billion years ago is

$$o\delta = 1.8 \quad (9)$$

Here, the present inertia force coefficient (pδ) is

$$p\delta = 1 \quad (10)$$

From Equations (2), (9) and (10), a relation between the present centrifugal force (pFc) and the old centrifugal force (oFc) of 3.5 billion years ago is

$$oFc \approx 1.8 pFc \quad (11)$$

When a mass (m) rotates around a circle of the radius (r) with a speed (v), the equation of centrifugal force (Fc) must be corrected using the inertia force coefficient (δ). Therefore,

$$Fc = \delta \frac{mv^2}{r} \quad (12)$$

From Equations (11) and (12), two cases to explain the rotation of the very strong centrifugal force are considered.

## 2.1 Constant Rotation Radius

First, the rotation radius of the Earth has not changed, and the rotation speed 3.5 billion years ago was much slower than it is now. From Equations (10) and (12), the present centrifugal force (pFc) is

$$pFc = \frac{m(v2)^2}{r} \quad (13)$$

Here, a present rotation speed is "v2". From Equations (9) and (12), the old centrifugal force (oFc) is

$$oFc \approx \frac{1.8m(v3)^2}{r} \quad (14)$$

Here, a rotation speed of 3.5 billion years ago is "v3". Because each "m", "M" and "r" is constant, a present gravitational force (pFg) between the masses "m" and "M" is equal to an old gravitational force

(oFg) of 3.5 billion years ago. Therefore, the present centrifugal force (pFc) is equal to the old centrifugal force (oFc) of 3.5 billion years ago. From Equations (13) and (14),

$$\frac{m(v2)^2}{r} = pFc = oFc \approx 1.8 \times \frac{m(v3)^2}{r} \quad (15)$$

From Equation (15),

$$1.8 \times (v3)^2 \approx (v2)^2 \quad (16)$$

From Equation (16),

$$v3 = \frac{v2}{\sqrt{1.8}} \approx \frac{v2}{1.35} \approx 0.74(v2) \quad (17)$$

Therefore, when the radius is constant, the centrifugal force of 3.5 billion years ago is equal to that of the lower speed than it is now. Then, one year was about 493 days. When a celestial body (m) rotates around a center celestial body (M), the centrifugal force (cF) is equal to the gravitational force. From Equations (7) and (12),

$$G \frac{mM}{r^2} = F = Fc = \delta \frac{mv^2}{r} \quad (18)$$

From Equation (18),

$$v = \sqrt{\frac{GM}{\delta r}} \quad (19)$$

According to the Big Bang theory, its rotation speed gradually became faster with time because the inertia force coefficient (δ) changed with the expansion of the universe. This change must be applied to all the rotating celestial bodies of the universe. Each "M", "r" and "δ" infinitely exists. Therefore, each different change to the speed is required to all the rotating celestial bodies.

This is similar to the contradiction that each different rotation speed is required for all the celestial bodies in the universe of Ptolemaic geocentric system theory [10]. In it, the infinite laws were required because each rotation speed of all heavenly bodies related to the distance between the Earth and them. The number of celestial bodies is infinite.

Similarly, it is impossible that miracle speed changes would occur in all rotating celestial bodies in the universe. Therefore, there is the same mistake there as Ptolemaic geocentric system theory in the Big Bang theory.

## 2.2 Constant Rotation Speed

Second, the rotation speed of the Earth has not changed, and the rotation radius 3.5 billion years ago was much shorter than now. The present distance between the Earth and the Sun is "r1". From Equations (10) and (12), the present centrifugal force (pFc) is

$$pFc = \frac{mv^2}{r1} \quad (20)$$

From Equation (7), a present gravitational force

(pFg) is

$$pFg = \frac{GmM}{(r1)^2} \quad (21)$$

Here, each mass of the Earth and the Sun is m and M. The present gravitational force is equal to the present centrifugal force because of the rotation. From Equations (20) and (21),

$$pFc = \frac{mv^2}{r1} = pFg = \frac{GmM}{(r1)^2} \quad (22)$$

From Equation (22),

$$v^2 = \frac{GM}{r1} \quad (23)$$

Next, an old distance of 3.5 billion years ago between the Earth and the Sun is "r2". From Equations (9) and (12),

$$oFc \approx \frac{1.8mv^2}{r2} \quad (24)$$

From Equation (7), an old gravitational force (oFg) is

$$oFg = \frac{GmM}{(r2)^2} \quad (25)$$

The old gravitational force is equal to the old centrifugal force because of the rotation. From Equations (24) and (25),

$$\frac{GmM}{(r2)^2} = oFg = oFc \approx \frac{1.8mv^2}{r2} \quad (26)$$

From Equation (26),

$$v^2 \approx \frac{GM}{1.8(r2)} \quad (27)$$

From Equations (23) and (27),

$$v^2 = \frac{GM}{r1} \approx \frac{GM}{1.8(r2)} \quad (28)$$

From Equation (28),

$$r2 \approx \frac{r1}{1.8} \approx 0.44(r1) \quad (29)$$

From Equation (29), the old distance of 3.5 billion years ago between the Earth and the Sun is 44% of the present distance assuming a constant rotation speed. The present distance between the Earth and the Sun is 149,600,000 km, and the present distance between the Earth and the Sun is 108,200,000 km. And, the present distance between Mercury and the Sun is 58,000,000 km. Therefore, it has been concluded that the old Earth of 3.5 billion years ago had rotated near the current position of Mercury according to the Big Bang theory. Cyanobacteria could never live on the Earth of 3.5 billion years ago because it was very hot. That contradicts the claim that cyanobacteria existed 3.5 billion years ago. Therefore, the Big Bang theory is contradicted in both cases.

### 3 Results

According to the Big Bang theory, the Earth at that time had rotated near the position of Mercury because the centrifugal force 3.5 billion years ago was 1.8 times greater. Therefore, the Big Bang

theory is contradicted by the fact that Cyanobacteria lived 3.5 billion years ago.

## 4 Discussion

This author got introduced to the Big Bang theory in 1979 and intuitively felt that it was incorrect. And he pointed out the mistakes of the Big Bang theory [2, 11, 12]. "Time dilation of high redshift quasars," "surface brightness," and "CMB" can be explained with the stress cosmology [11]. Therefore, three problems can never be an absolute proof of the Big Bang theory. His intuition to refute the Big Bang theory may be explained with the example of the cyanobacteria. And the mistake of the Big Bang theory can be mathematically explained with the stress cosmology [2, 11, 12]. Furthermore, the absence of Dark Matter, Dark Energy, and limited galaxy sizes can be explained with the corrected gravitational equations of Newton and Einstein, according to stress cosmology [12].

## 5 Conclusions

The Big Bang theory is contradicted by the fact that Cyanobacteria lived 3.5 billion years ago.

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