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Why a Big Bang Actually Never Happened - The Physical Time is an Active Property of Active Space, Active Energy and Active Matter

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Abstract: ***Although the Big Bang theory is most widely accepted to date, but there are proper reasoning against the Big Bang theory which proves a Big Bang actually never happened. What is actually a physical time? Why the physical time exists at all. The physical time is an active property of active space, active energy and active matter or combination of two or all. The paper will discuss about that why a Big Bang actually never happened. The paper will also show why there exists the physical time at all as an active property of active space, active energy and active mass.***

Keywords: The Physical Time, Big Bang Theory, Active Space, Active Energy, Active Matter

1. Introduction and the Theories

Theory 1: The Universe obeys symmetry property to be a symmetrical Universe. According to symmetry property, there should be a Big Crunch if there was a Big Bang.

Theory 2: The Universe ever exists in a cyclic order of latent and active states. The Universe was in latent state with latent space, latent energy and probably latent matter, all are useless states with respect to psychological ground.

Theory 3: The physical time did not have any meaning, for a latent Universe, thus space, energy and matter of the latent Universe were evolution free.

Theory 4: A disturbance occurred in the latent Universe to put the space in active mode which made space to expand faster than the speed of light at the present state of the Universe.

Theory 5: An active space produced an active energy following by an active matter to produce present state of the Universe.

Theory 6: An active space is the necessary condition for existence of the physical time; an active energy and active matter are the sufficient conditions of the physical time to exist the way it is at the present state of the Universe.

Theory 7: The degree of activeness of the Universe grows with time; that is why, we have the second law of thermodynamics which states that the entropy (a measure of disorder in a closed system) increases with time.

Theory 8: The active space, active energy and active matter are functions of time too. The degree of activeness increases with time at the present state of the Universe.

Theory 9: When entropy or activeness will reach its maximum state, the Universe will experience negative entropy, the Universe will be heading towards contracting phase followed by latent state to support the concept of symmetrical Universe.

Theory 10: The space itself violates the Universal speed limit of the Universe to grow faster than the speed of light so that after certain distance (radius of 46.6 billion light years or 93.2 billion diameters) information can never reach us as the part of the Universe beyond the radius is expanding faster than the speed of light, thus, we have observable Universe within that radius.

At the present state of the Universe, the space is expanding at a critical rate so that for an observer from Earth, there is a radius beyond which light cannot reach us and that radius is the radius of observable Universe for us [1, 2].

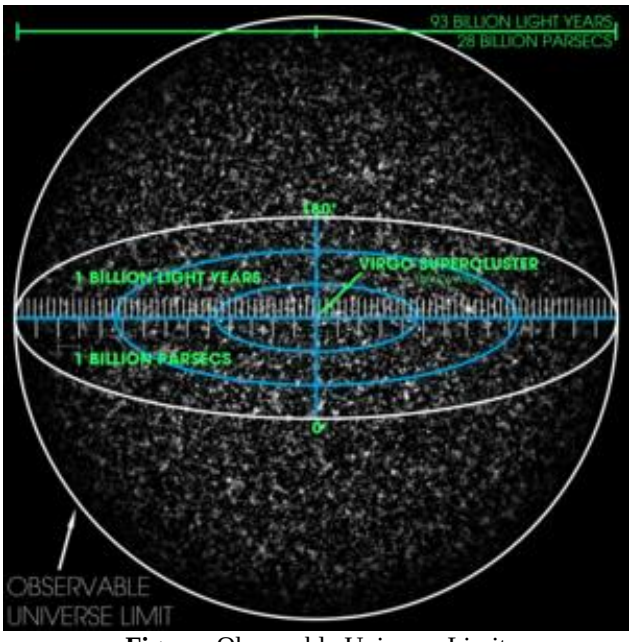

Figure: Observable Universe Limit

On a large scale, the Universe looks extremely even from all sides which proves that the Universe obeys the symmetry property [3, 4]. The space is expending at a critical rate to avoid Big Crunch [5, 6]. So, it can be concluded that Big

Crunch is never going to happen [7, 8]. To support symmetry property of the Universe, if there will not be any Big Crunch, there did not have any Big Bang either. The Big Bang assumes there is an explosion to form the Universe from a point (having infinite density and infinite heat) [9, 10]. Suppose there is an explosion of crackers on Earth, every explosion of cracker produces a vacuum, the air pressure fills the vacuum produced, similarly, if the Big Bang were an explosion from a point, there should be an absolute vacuum and there should not be any pressure to fill the vacuum. But there is nothing called absolute vacuum in the observable Universe. It disproves the Big Bang theory. The Big Bang assumes no space at the initial stage of the Universe [11, 12]; well, a point needs a space to be a point too. The Bag Bang assumes infinite heat before explosion [13, 14]; well, infinite heat needs extreme (possibly infinite) vibration of the contents inside the point. The point itself does not have space for extreme (probably infinite) vibration of the contents. According to the conservation of energy, energy can neither be created, nor destroyed. The total amount of energy of the Universe is a finite quantity [15, 16]. If the point before Big Bang had infinite heat (energy), then how this energy become finite after Big Bang to obey conservation of energy. The whole Universe was in a point [17, 18] with infinite density is just an absurd idea. If it were, it would be a Black hole itself, and we never have information about black hole explosion to till date. All these discussion disproves the concept of Big Bang theory. The Big Bang actually never happened. The space, the energy, matters everything were there in the Universe but in a latent form. The latent Universe did not have any evolution and the physical time did not have any meaning in the latent Universe (there was no time arrow in the latent Universe).

2. The Latent Universe versus The Active Universe

The latent Universe was three spatial dimensional Universe; it was with no temporal dimension. Everything was at absolute rest at the latent Universe, no evolution was there. Any odd incident or disturbance made the space to be active and start moving (expanding at the present state of the Universe). Moving space made it moving energy and moving matters to become active energy and active matters. Physical time is a function of motion (of energy or matter) and expansion or contraction (of space). The physical time exists because there is motion, evolution, expansion and contraction (of space, matter and energy). So, there is no absolute rest in the present observable Universe because space, mass and energy are function of temporal movement. Thus, active space, active mass and active energy form the active Universe – the present state of the Universe. The present arrow of time is in positive direction because it is the function of space expansion. The time would be in opposite direction if the space were contracting.

$$T = f(S, E, M)$$
$$`dT = KdS + K_1 dE + K_2 dM$$

Where T is the physical time of the Universe.

S is the active space, E is active energy, M is the active Mass

K, K_1, K_2 are the Universal Constants.

dS is the rate of space expansion.

dE is rate of change of effective energy (such as gravity).

dM is the rate of change of effective mass (a mass with different velocity have different but directly proportional effective mass).

dT is the rate of change of time.

As space is expanding, K is not zero at the present state of the Universe. At free space (without mass and energy),

$$dE = dM = 0$$
$$K = \frac{dS}{dT}$$

KdS is the major contributor (globally) to the temporal movement. $K_1 dE$ and $K_2 dM$ also contribute to the temporal flow (although locally) a little. That is why different mass has different time movement but the difference is very tiny.

3. Conclusion

The Universe obeys symmetry property to be symmetrical Universe. According to the symmetry property, there should be a Big Crunch if there was a Big Bang. The Universe actually ever exists in a cyclic order of latent and active states. The Universe was in latent state with latent space, latent energy and probably latent matter, all are useless states with respect to psychological ground. The physical time did not have any meaning, for a latent Universe, thus space, energy and matter of the latent Universe were evolution free. A disturbance occurred in the latent Universe to put the space in active mode which made the space to expand faster than the speed of light at the present state. An active space produced an active energy following by an active matter to produce present state of the active Universe. An active space is the necessary condition for existence of physical time and active energy and active matter are the sufficient conditions of the physical time to exist the way it is at the present state of the Universe. The degree of activeness of the Universe grows with time; that is why, we have the second law of thermodynamics which states that the entropy (a measure of disorder in a closed system) increases with time. The active space, active energy and active matter are functions of time too. The degree of activeness increases with time. When entropy or activeness will reach its maximum state, the Universe will experience negative entropy, the Universe will be heading towards contracting phase leading to the latent state (at absolute rest) to support the concept of symmetrical Universe. The space itself violates the Universal speed limit of the Universe to grow faster than the speed of light. So, there is a radius after which no information can be accessed from Earth, this radius form observable Universe for us.

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