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It Is As If We Are Going Nowhere with the Universe

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Abstract: ***The origin of the Universe is a bit like very old and common place question- what actually came first?-the chicken or the egg. Till date physicists shy away with such questions as it belongs to metaphysics or religion and it does not come under the science arena. Basically, the truth is that we want to perceive the Universe according to our own thought process or simply psychology of human being. From psychological point of view, we generally formulate a problem; try to analyze the problem in details with the thought process (theoretically) and with available scientific tools (experimentally) to reach to the solution or conclusion. We focus on some part of the Universe to get specific information to generalize the conclusion about the Universe. But why the Universe should work according to the psychological based processes. It could be that the Universe is never a problem for formulation; it could also be that the Universe never obeys conclusion based psychology. It is true that we are part of the Universe and not the Universe is the part of us. Because our brain works based on causality i.e. we can retain past to anticipate present and no interaction with future, the systems that are realizable by us are all causal systems. We cannot realize non-causal or anti-causal systems. It is because our biological system that we mimicry is not non-causal or anti-causal system. That is the reason that we cannot anticipate future although future is fairly simple and unique, definite as the counterpart past is. We can only mimicry our biological system to develop any artificial system where futurity is simply out of scope for us. That is where God plays an important role in our life for many reasons such like future is uncertain, the world is a cruel world. These made us weak in mind, believing that God knows and can modify in our favor what will come in future. Thus, we worship God to get favor of Him. The truth is that we can only build systems within our range of vision which is purely causal (Cause and effect relationship-cause is the reason to be the effect that way it is). The cause is the reason that the effect exists in the way it is and effect is also the reason that the cause that already happened, the way it was. They are mutually inter-dependent on each other.***

Keyword: The origin of the Universe, metaphysics and science, Causality, simple and unique, definite future, non-causal or anti-causal systems

1. Introduction

The cosmic microwave background radiation (CMB) is a radiation that fills the Universe [1, 2] and can be detected as almost the same in every direction [3, 4]. This radiation is invisible to the necked eye, so they cannot be seen without proper instruments [5]. It created shortly after the Universe came into being in the Big Bang [6]. The CMB represents the earliest radiation that can be detected till date. Astronomers have linked the CMB to seeing sunlight penetrating an overcast sky [7]. Looking out at the deep space and therefore back in the deep time, we can see the CMB radiation saturating the space beginning at about 378,000 years after the Big Bang has occurred [8]. Before the creation of the CMB, the Universe was hot dense and opaque or obscure plasma state containing both matter and energy [9]. The Big Bang occurred around 13.82 billion years ago followed by very brief inflation era (The Universe was dusty, foggy and opaque or obscure), followed by recombination era when proton and electron along with neutron combined together by strong nuclear force which made the Universe transparent and clear. During recombination era, the electron and protons along with neutrons had no more enough power to escape from strong nuclear force and the Universe cooled to a temperature of about 5,000 degrees Fahrenheit (or 2,700 degree Celsius) [10], cool enough for electron and proton to recombine into hydrogen atom and in this process photons were released and today, this radiation is called the CMB which is hovering around the Universe that can heat up the Universe up to 2.7 degree Celsius above absolute zero [11]. It is followed by Dark Age (between 13.37 to 13.82 billion years) where very few stars were formed. The CMB provides insight into the composition of the universe as a whole. Most of the universe is actually made up of dark energy (68.3%), the mysterious force that drives the accelerating expansion of the present universe. The next largest ingredient is dark matter (26.8%) [12, 13], which only interacts with the rest of the universe through its gravitational attraction only and the rest (4.9%) is normal matter. According to Big Bang theory, the Universe was hot dense earlier and at the beginning it was of infinite density. On the other hand a steady state model of the universe is that the matters are continuously created in the Universe as it is expanding so that the density is always the same [14, 15].

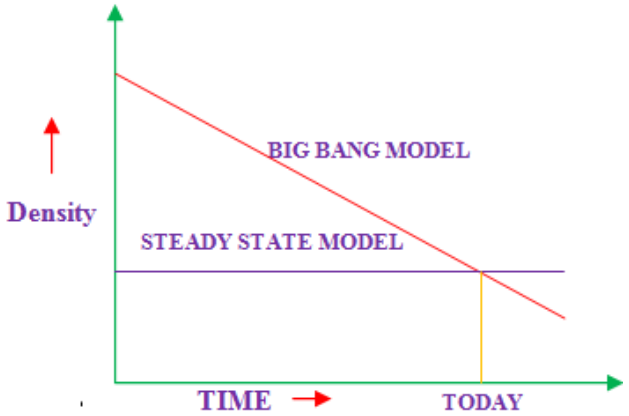

Figure: Density Vs Time of the Universe

By the mid 20th century there were two compelling theories for the origin of the Universe [16]. Penzias and Wilson theorized that if Big Bang theory was correct, the Universe would be filled with back ground radiation left over from the creation event which agrees remarkably with the CMB and thus, Big Bang theory is universally adopted[17, 18].

2. It is Give and Take of Order

As long as we are in conscious mind, we attain gradually from a higher order state to lower order state, thus our conscious mind become eccentric from concentric gradually. That is the cause of our sleeping so that we can regain the higher order state from lower order state. The conscious mind is active and subconscious mind is inactive to lose higher order state and to gain lower order state. Similarly, conscious mind is inactive and subconscious mind is active to lose lower order state and to gain higher order state. Although 35% of our brain belongs to unconscious mind, but we really do not know how it works and what it works. Thus by switching between conscious mind and subconscious mind, we lose and regain higher order state with give and take of states with the Universe. If we can calculate accurately the states of our brain of a particular time t_0, we will be able to calculate any state of our brain at $t \geq t_0$ or $t \leq t_0$ and thus we will be able to extract past as well as future information. The necessary condition is that the states of the brain have to be known at a particular time t_0. Because it is give and take of states of brain with the Universe (when our brain gain higher order state, the Universe shifts to lower order state and when we lose higher order state, the Universe gain higher order state), the completely known states of brain can eventually calculate of the states of the Universe (because it is give and take of states) at that particular time t_0 when the states of the brain is calculated. Similarly, when we will know the complete set of states of the Universe at particular time t_0, we will be able to calculate any state of the Universe at $t \geq t_0$ or $t \leq t_0$ and thus we will be able to extract past as well as future information of the Universe. That is the reason, a low confident man (who holds lower order of states) thinks that the world is correct and he is wrong in a general sense in most of the cases because higher order states of the Universe dominate over his own lower order states. On the other hand, a highly confident man thinks that he is right and the world is wrong in a general sense in most of the cases because higher order states of his brain dominate over the lower order states of the Universe. Actually these are the states of the mind (either higher order or lower order) that dominates the decision making process for living being in general. Thus the states of the Universe can be calculated from the psychological states of brain. But finding out states of brain at a particular time t_0 seems a uphill task as we can even cannot calculate the interaction of three particle (3^{rd} order equation) accurately which made us conclude that we are going nowhere with the Universe.

3. On the Big Bang to Black Hole

From the Big Bang theory, it is believed that the Universe started from the zero-size [19, 20] with infinite density- according to the theory of general relativity, it is singularity where the theory of general relativity along with other scientific theory just breaks down and they are no more valid theory in singularity. It is also observed that Sagittarius (the black hole of our galaxy, the Milky Way at the center) is also in singularity with infinite density but it is not a zero-size. It has some non-zero volume; in fact huge volume can be detected at the center of our galaxy as a black circle. The Big Bang and Black Holes are both examples of quantum states of matter but both quantum states are not symmetrical to each other. Since the Big Bang, the quantum state of matter existed where it was all proton, electron, neutron, neutrinos, and photon colliding and bumping on each other and scattering around the Universe made the Universe foggy, dusty and very very opaque or obscure. In the quantum state, the strong and weak nuclear forces were not existed. As the Universe cooled down to a temperature of about 5,000 degrees Fahrenheit (or 2,700 degree Celsius), cool enough for electron and proton to recombine into hydrogen atom [21, 22] and they were no more able to break strong nuclear force; the stable atom made the Universe transparent and clear [23]; it was free from dust and fog of quantum state. As the Universe is expanding at a critical rate just to avoid collapse again and as the Universe cooled down enough, the initial photons of Big Bang that remained after recombination of electron and proton are still hovering around the Universe but with very little energy that can heated up 2.7 degree above absolute zero, we call it now the cosmic microwave background radiation (CMB) and also popularly called 3 Kelvin radiation [24, 25]. But the asymmetry between the singularities between the Big Bang and Black Holes made us dubious as if we are going nowhere with the Universe. It is as if we are engulfing by problems and we are running out of conclusions or solutions.

4. Why Does God Exist?

God exists everywhere, where we are unsolved and uncertain. God does not exist in the past because it is certain and definite; God exists in the future because it is uncertain for us. There was a God of rain, when we did not understand raining process. The God disappeared when we understood the raining process. There was a God of ocean, when the ocean was mystery for us. When solved, God just disappears from that particular field. As long as the Universe is unsolved, God will exist. Because we have little scientific ability to solve the Universe, it is better and safer side to say God will ever exist to hide our scientific and psychological ability. As science and religion, neither one gives us the solution of the Universe; it is as if we are going nowhere again with the Universe. The Universe might be very simple and we might have hard look at it because of our limited ability to look insight to it or might be we started our scientific journey in a wrong direction initially that grew as giant error by now making us convinced that we are really going nowhere.

5. Conclusion

We looked the solution of the Universe everywhere. We tried all possible solutions. The ancient Greek discovered Arithmetic to solve the Universe. When it was proved insufficient, they started finding alternatives of arithmetic. And then algebra came into existence, proved again insufficient to solve the universe, then geometry and trigonometry, which fell in the same category later. No matter what we discover, proves insufficient later like the theory of general relativity and quantum mechanics also

proved to be insufficient and can only be treated as partial theories as they represent particular conditions of the Universe and on other situation , they just beak down such as in singularity. And thus sill we are in a position that can be termed as we are going nowhere with the Universe with no beginning of our journey and with no end.

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