



Loop Theory of Universe

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Received: August 24, 2020; Accepted: August 25, 2020; Published: September 20, 2020

Abstract

According to the standard Big Bang Model, the universe was born during a period of inflation that began about 13.8 billion years ago. Like a rapidly expanding balloon, it swelled from a size smaller than an electron to nearly its current size within a tiny fraction of a second.

Initially, the universe was permeated only by energy. Some of this energy congealed into particles, which assembled into light atoms like hydrogen and helium. These atoms clumped first into galaxies, then stars, inside whose fiery furnaces all the other elements were forged. This is the generally agreed-upon picture of our universe's origins as depicted by scientists. This model explains many of the things, such as the remarkable smoothness of space-time on large scales and the even distribution of galaxies on opposite sides of the universe.

Keywords: Big bang model; Theory of relativity; Sneak attack

Introduction

Sometimes, there are things which make the theory little uncomfortable to accept. The theory which states that the universe underwent a rapid inflation early in its history cannot be accepted so easily, and it relies on the existence of a mysterious form of energy in the universe's beginning that has long since disappeared. For some scientists, inflation is a clunky addition to the Big Bang Model, a necessary complexity appended to make it fit with observations. This wouldn't be the last addition. We've also learned there has to be dark matter in the universe, and now dark energy, said Paul Steinhardt, a theoretical physicist at Princeton University. So the way the model works today is you say, 'OK, you take some Big Bang, you take some inflation, you tune that to have the following properties, then you add a certain amount of dark matter and dark energy.' These things aren't connected in a coherent theory. If you talk about a line segment than we know about the start and end of that line segment. In the same way we are taking the universe a line segment so that we know where the beginning and the end of universe is. But to be clear it is not that much simple as we thought of it, instead it is way more complex than that. Before we go through the topic first of all let me tell you some basic concept required for this theoretical explanation [1].

Cause and Effect from the Special Theory of Relativity

Let there be two teams, alpha and beta. Both the teams meet at one point, that is origin (0,0) in the space time diagram. Both

have a peace treaty. Then team alpha moves from that point with a constant velocity of 0.6 C to his own planet. But after 4 years team beta planned to have an attack on team alpha so they developed such an engine which can travel upto a speed of 3 C. So they have a sneak attack on team alpha after one year when Alpha team have travelled a distance of 3 light year, that is on the 5th year of team beta shown in (FIG. 1).

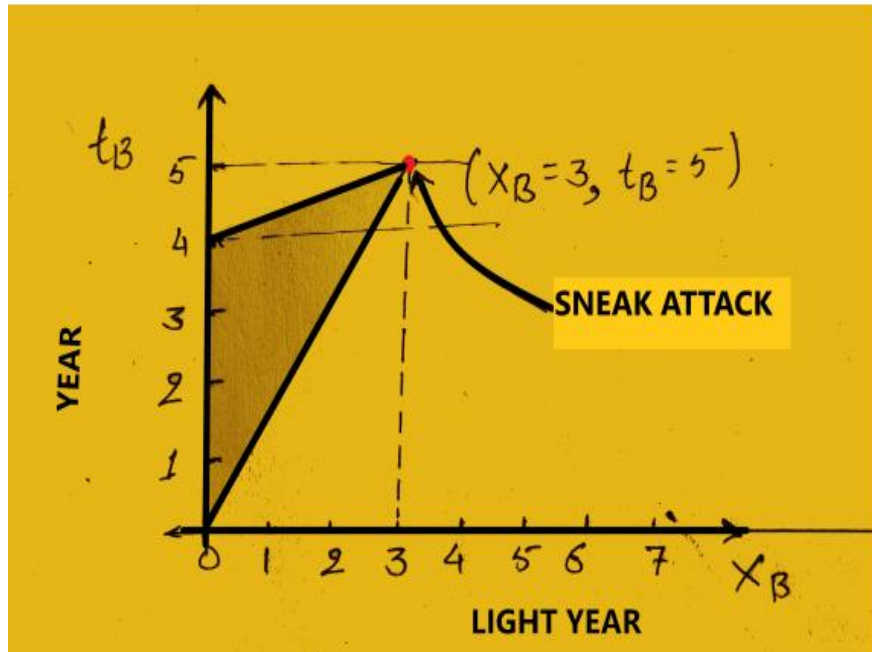


FIG. 1. Sneak attack.

At the time of sneak attack:

Team Beta's co-ordinates, from Beta's frame of reference: so clearly the co-ordinates for Beta are $(3, 5)$ Attack in Beta's frame. Team Alpha's co-ordinates, from Alpha's frame of reference. As they are at rest from their own frame of reference and found that the team beta's planet is moving in backward direction (so we put the negative sign). Therefore, for Alpha, the Beta's clock are running slower than there clock. $t_b=5$ years, $x_b=3$ light year;

$$X_a = \Gamma (X_b - v_a t_b)$$

$$X_a = 0 \text{ light year}$$

$$T_a = \Gamma (t_b - v_a/c^2 X_b)$$

$$T_a = 4 \text{ years}$$

Now coordinates for team Alpha are $[0, 4]$ Attack in Alpha's Frame. As they are at rest in there frame.

At the time of invention of spaceship:

The time of Invention for Team Alpha from Beta's prespective, as the clocks of team Alpha are running slower for them.

$$T_a = \Gamma (t_b - v_a/c^2 X_b)$$

$$T_a = (1.25) (4 - (0.6/c^2)0)$$

$$T_a = 5 \text{ years}$$

For Beta:

$$\text{Launch: } T_{b,a} = 4^{\text{th}} \text{ year}$$

$$\text{Attack: } T_{b,a} = 5^{\text{th}} \text{ year}$$

For Alpha:

Launch: $T_{a=5^{\text{th}}}$ year

Attack: $T_{a=4^{\text{th}}}$ year

Therefore in Alpha's frame, the launch (invention) of the spaceship and the sneak attack occur at 5th year and 4th year respectively, according to their clocks (Alpha's clock) But the invention was done in 4th years in Bob's frame of reference. Now the question is that, the attack occurs in 5th year for team Alpha rather than 4th year in Bob's frame of reference? This proves that the body moving faster than speed of light reverse the cause and effect. That is the effect is observed before the cause. Hence no order of event.

How the Big Bang Occur

As we explain above it may also be possible that somehow in future. All the universe get eaten up by the black hole and the black hole get contracted so much that it can no longer hold the energy of the particle. Than a sudden blast happens and that blast may throw out the whole energy of the universe from an atom sized particle. The energy and the particle released by that blast may travel hundreds or thousands of times faster than speed of light (don't know the accurate value of velocity) such that the energy from that blast travels back in time. As stated in the above fact (the cause after effect) that energy travels back in time and occur in the form of, what we today call it as the "Big Bang". So we can say that the big bang in our world has to occur in future which has created us all. Since this big bang has to occur in future so it will again happen in the similar way it has happen in our world which has created us. Hence we can say that these events are happening in the "loop". And for a loop There is no end and start. This can answer the greatest question of our time [2].

1) Why we are here?

2) What is our purpose?

That we are nothing but just the part of this great never ending loop. And like us everything in the universe die and reborn, even the stars, planet and the greatest structure of the universe that is the "Black holes"

References

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