



WWJMRD 2021; 7(1): 50-52  
www.wwjmr.com  
International Journal  
Peer Reviewed Journal  
Refereed Journal  
Indexed Journal  
Impact Factor MJIF: 4.25  
E-ISSN: 2454-6615

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## Origination of the Universe and Secrete of Time with Big Bang explosion

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### Abstract

Universe was essentially the part of star, an explosion made a big bang and it started distributing. Still the universe is getting expanded, that may also be called as cosmological expansion. This paper consists of some facts that could elaborate some critical situations where some giant changes came in existence into the universe. The real concept of time is a genuine issue of the universe at every point, of course the structure and design of the space quite matters in this. A complete book can be designed to elaborate this concept, but I tried my best to explain the idea behind this so precisely.

**Keywords:** Expansion of universe after the big bang, Distribution in universe, Disturbance of universe, Origination of universe and important role of fundamental forces, Origination of universe and role of gravity, Role of universal fundamental forces in universe.

### Introduction

#### Origination of Universe and Secret of Time:

This is the basic view that the universe originated from the explosion of Big Bang. Just like the whole universe was expanded with a large scale evolution. [1] Even the gravity came in existence 10-43 seconds after the birth of Universe. [2]

According to NASA, after inflation the growth of the universe continued, but at a slower rate. As space expanded, the universe cooled and matter formed. One second after the Big Bang, the universe was filled with neutrons, protons, electrons, anti-electrons, photons and neutrinos.[3]

#### Universe stuff existence after Big Bang:

Results from NASA's Wilkinson Microwave Anisotropy Probe (WMAP) released in February 2003 show that the first stars formed when the universe was only about 200 million years old. Observations by WMAP also revealed that the universe is currently about 13.7 billion years old. So it was very early in the time after the Big Bang explosion that stars formed. [4]

In physical cosmology and astronomy, dark energy is a term that describes an unknown form of energy that affects the universe on the largest scales. The first observational evidence for its existence came from supernovae measurements, which showed that the universe does not expand at a constant rate; rather, the expansion of universe is accelerating. [5]

Now the concept is disclosed that the universe started with its birth and still it is expanding. The reason is weak dark energy.

Gravitational waves are disturbances in the curvature of space-time generated by accelerated masses that propagates as waves outward from their source at the speed of light. They were proposed by Henri Poincare in 1905. [6]

There are four fundamental forces which are governing the entire universe which lead to the existence of the universe. All that forces concern simply about attraction, anyhow gravity is the weakest force and strong nuclear force is the strongest force among them. A minor change in any of the four forces can be responsible of destruction of the universe and its complete system.

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Like four fundamental forces are governing the universe, dark energy is a reason of expansion of the universe. No doubt we are observing the increasing distances of the galaxies which are making our theme stronger about the expansion of universe.

**My fundamental research and idea:**

Initially there was no defined time when Big Bang occurred. When the star explosion (Big bang) took place universe got expanded, similarly time started like counting. I can claim my observation that initially when Big Bang explosion happened time also started linearly or it may also be true that time was existing before that. But there was no change in the time, like time was constant at every point. Still the universe is not completely ready; it is getting expanded and prepared itself using all those four fundamental forces as they all have infinite range.

As long as the time was going on how like the universe was also getting expanded with no change in the time. Then how today we observe change in time all over the universe? The simplest explanation I can give is, when initially Big Bang happened there was definitely one of the force among fundamental forces exist or may be all, and they are indeed concern to attraction as well. All that forces forced to shrink the universe. E.g. Like pure milk; there is nothing in it. If suddenly an outer unnecessary thing enters in it which then destroys all the features of milk and the density of milk also increases. Like the same universe was going on simply with no change, but these forces made a giant change.

If the universe was essentially empty with no stuff, these only the forces are responsible of all spatial stuffs existence. According to Einstein's equation  $E = mc^2$  energy was the initial form of universe. Then from the energy, hydrogen then helium formed, and approximately 99% of the universe is formed with these two elements. Remaining 1% is from the other elements of periodic table. Which means energy is strongly related to these fundamental forces.

How I described the shrinking of universe made change in time? The answer is crucial to know. As these forces made the universe shrunk, it means that the universe started changing in itself. And universe got shape like a zigzag paper, as how I define this as the **disturbance of universe**.



**Fig. 1:** this is how universe initially existed. Universe was like a simple paper.



**Fig. 2:** this is how universe disturbed. Universe became like zigzag paper.

Now universe has changed itself in a huge format. Yes! Definitely now there are many points of space are closer to each other which will be having a large amount of gravitational forces or any other fundamental forces that could be the reason time got changed. If many huge things set in a very small place that means the **space is very much complicated** and time got shrunk in that, hence time got faster. The similar reason for the expansion of a single thing which will be having a small amount of gravitational forces or any other fundamental forces that made time slower. **This is the phenomenon of the actual universe existence with respect to time.**

**Observations:**

If I have a straight way I can easily move from it with the similar energy. But if I get slopes in my way, I would need to change my strength. If the slope is from bottom to high, I shall have to increase my strength. And if the slope is from high to bottom I shall have to decrease my strength. Finally if I get potholes in the way I would need to manage my strength. This is how my energy reacts on the street ways. Now all these are dependent on the change made by the street. Similarly in the universe; if there was change in any point, suddenly the universe also manages its strength. And if something gets changed in the universe; strictly it'll affect the time, because time is only the parameter which has a huge relation with the universe and its design. Thus when the universe got shrunk, time got faster and stretching in universe made time slower.

**Black hole hypothesis:**

We are familiar with the black hole. Now we can determine the real structure of black hole using above phenomenon. Black hole shrinks the time, and according to my concept I can claim that black hole shrinks the space. Now whatsoever will be the event into the space, gets time slower which means; that event is shrinking the space. Now as much the time shrinks that much the thing will happen faster.

It is observed that if any physical body goes into the black hole, the person will be attracted towards it like being noodle. Why does it happen? The reason is actually same as I explained. Black hole shrinks the space, and as we know space is expanding as well, that would be the reason, at one side space goes out, simultaneously one force is pulling it in. It means space is itself extremely stretched. This is the reason a physical body can be noodle while entering in to the black hole.

One more concept **warm hole** we are familiar with. Combining of two black holes can make a warm hole,

which is indeed the short cut of two universes. How does it actually make connection of two universes? The answer exists in my claim itself. Black hole shrinks the space, now two different black holes are connected each other, which means two universes are highly stretched to a point where both holes are connected. Here I claimed for two black holes. But attraction always happens between two opposite factors, which means; one is black hole with another white hole. Same feature again a white hole can have (quality to shrink the universe).

#### Results and findings:

1. Space was simple with linear time. Fundamental forces made space complicated.
2. Complicated space changed the time structure, as it was going on linearly. This is the reason time is different at different places.
3. Space is extremely stretched around the black hole due to "disturbance of universe". I can define it as „the concept of disturbance of universe“.
4. Space got stretched because of the object into the space having high gravitational force or any of the fundamental force.
5. As many objects will increase, space will be shrinking. One time there will again only the one point space would be single (We're again there; where we were).

#### Theorems and Concepts:

**Complicated Space:** All the changes of space, existence of black holes, white holes, warm holes, galaxies, stars etc.

**Disturbance of universe:** When space got complicated, universe which was simple got indeed disturbed. Hence the linear time changed at the point where space disturbed. Extreme space disturbance made time changed enormously.

**Simple space and linear time:** At the time of Big Bang, space was neither complicated nor disturbed. It was simple and time was equal at every point.

**Space is very much complicated:** The object has enormous gravitational pull or any one from four fundamental forces, would shrink the space, towards itself. This is the main reason space gets stretched, i.e. Black hole is the object where space bends a lot because of its gravitational pull. Like there would be any object can twist the space. The phenomenon is nothing but kind of disturbance and shrinking of the space.

**We're again there; where we were:** We started a universe journey with the Big Bang explosion. Every time stars and space stuff got increased and space made itself shrunk. There is one time when universe will be again at a single point, because we are getting shrunk again with many higher objects because of their own respective fundamental force.

#### Conclusion:

After reading this entire content one thing must have cleared that all the circumstances happened in the universe were because of some specific reason. Change in space with change in time defines the entire universe. Hence a particular hypothesis can be claimed if all the logics and rules are coming up on a straight way. One thing must be

cleared that, there is no discrepancy in Einstein's model of universe and this concept of existence of the universe.

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