

Cosmology Science and ability

Question No. 1.

Briefly Describe the mostly accepted and popular theories about origin of the universe?

The problem of the origin of universe is oldest question like who came first? egg or universe? And what agency created universe? and what created that agency? or perhaps the universe and agency are existed for ever and not created.

Stephen Hawking

Theory about the universe creation.

- (1) Old theory.
- (2) New theory
- (3) Big Bang

1.1 - Old theory.

It was presented in 17th century. according to this theory universe is static infinite

and unchanged.

2. New theory.

it was after the invention of telescope. according to this theory universe is dynamic, changing and finite.

Big Bang

Big Bang theory invented by George Lemaitre and George Gamow

Popular theory about universe.

Big Bang is the leading theory about the creation of universe about 15 or 20 billion years ago. expansion cause universe creation. it is called Big Bang. Before it the universe was in a (balloon) bubble which is thousand time smaller than pinhead and it was named as Singularity.

Creation of universe.

The explosion cause universe being. Time, space matter all form after Big Bang. after one second the temperature drop 1 billion Celsius. it is enough form

Particle formation. Protons and neutrons are formed. The matter and non-matter and forms. Some matter destroy each other and some are survived. After the 30000 light year temperature of earth decrease 3000 Celsius degree which allow the cloud to capture the atoms. They are universe filled with atom of hydrogen and helium.

And the gases and dust particles that form celestial bodies

Evidence of Big Bang.

To analyse the spectrum of light stars astronomers tells how fast they move around the earth. if they move away from earth the longer wavelength shift Red wavelength effect called Red Shift

if it is move towards earth the shorter shift blue wavelength shift effect called Blue Shift.

Red Shift support the Big Bang theory.

Conclusion

The every thing in the universe ~~held~~ held by gravity that pull the objects around it. it is still exploded and universe come into exist.

Question

Describe the method to estimate the age of universe.

There are two methods to estimate the age of universe.

(1) by looking the oldest stars.

(2) Measuring the rate of exploding by the extrapolating back the Big Bangs just the crime detector can trace the bullet in a hole of the wall.

(1.1) By looking the oldest stars

The spinning of stars slow down at the oldest age. and astronomer estimated that mathematically how old is it.

(1.2) Big Bang

The astronomer believed that universe began with Big Bang and it was 13.7 billion years ago. At that time universe in a bubble that are thousand time smaller than pinhead named singularity. it is hotter and denser any thing we know. and it is still expanded. it is sudden expanded and form universe.

2. Future of universe:

(1) Open theory

(2) Closed theory

(2.1) Open theory

according to this theory universe expanded until all hydrogen atoms used up and after that it become dead.

(2.2) Closed theory

There is a force of gravity that pull the object and galaxies around it and expanded the universe and reverse Big Bang occur that cause formation of new universe. which is completely different from it.

Conclusion

The astronomers estimate the age of universe by the explosion of Big Bang

3.5

