

NOTES

Stages of Big Bang theory

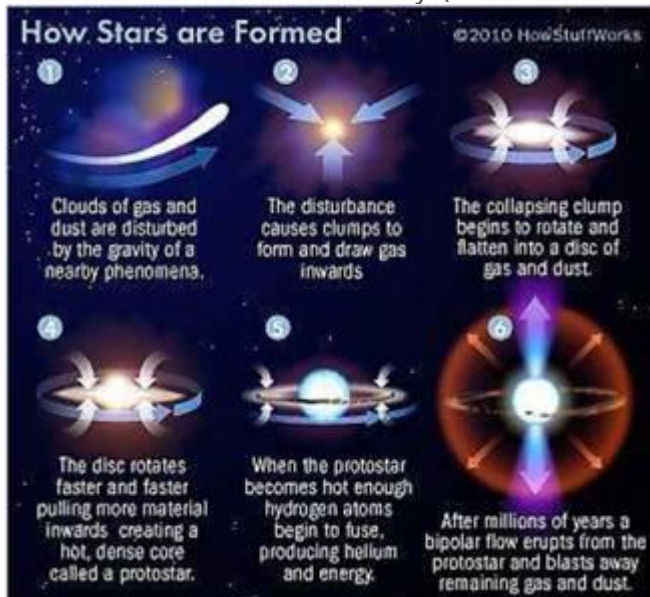
- (i) In the beginning, all matter was in the form of tiny ball(singular atom) with unimaginable small volume, infinite temperature and infinite density
- (ii) About 13.7 billion years ago the tiny ball exploded violently. The expansion continues even today.
- (iii) As a result some energy was converted into matter
- (iv) Within fraction of second there was rapid expansion
- (v) The expansion slowdown after three minutes and first atom formed
- (vi) After 300000 years the temperature dropped down to 4,500 K and gave rise to atomic matter.
- (vii) The universe became transparent.

Steady State Theory

The Big Bang Theory is the standard model of cosmology; however, there have been several other models for the universe. One such model, which gained a large following in the 1950 and 60 (before becoming obsolete in the early 70), is the Steady State Model. This model asserts that the general character of the universe is not changing over time (hence, a steady state).

Steady State theory propounds the idea that the universe looks the same no matter the viewpoint and that the universe has always looked like this; essentially, the theory states that the universe is uniform throughout both time and space. The advantage of Steady State theory over some other theories is its simple and aesthetic explanations of certain troublesome topics. For example, since the universe is unchanging throughout time, the universe needs no convoluted explanation of its beginning. In addition, to account for the decrease in density that would result from expansion, steady state theory claims new matter constantly must be created in order

to maintain a constant density (and therefore a static appearance).



SUBJECT TEACHER

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