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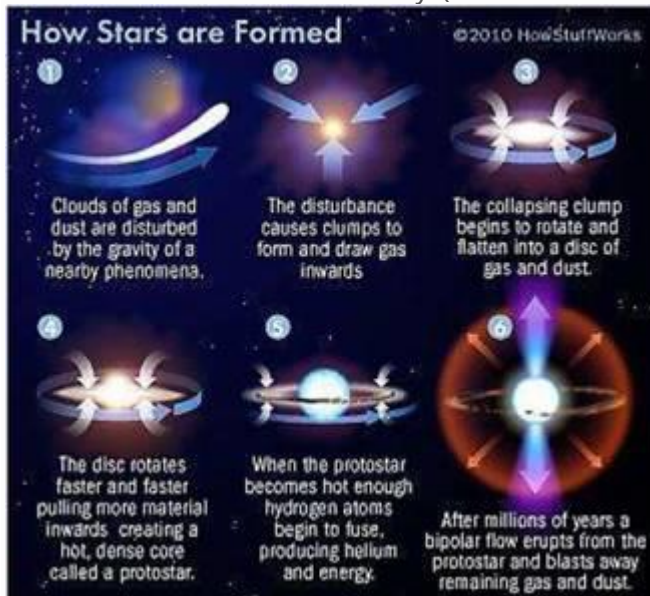
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Ch: THE ORIGIN AND EVOLUTION OF THE EARTH(NOTES)

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 proponent 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).



The Demise of Steady State



The Steady State theory offered simple solutions to the way the universe worked, but as observatories looked farther back into the early eras of the universe, astronomers started to see contradictions to the theory. Astronomers found that the universe actually evolves over time. For example, cosmologists discovered different types of

stars are more common during different ages of the universe. The final demise of the Steady State theory came in the late 1960's with the discovery of the Cosmic Microwave Background.

Steady State Theory could offer no convincing explanation for the CMB and as such, most contemporary cosmologists feel this theory is wrong

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