

Theoretical Basis Hypotheses for the Origin of Life in Protoplanetary Disks

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Abstract : The primary purpose of this review is to present hypotheses. In this theoretical study exploring the origin of life, the main argument is that life on Earth may not have originated on Earth but rather in the protoplanetary disk at the time of the solar system's formation. This hypothesis focuses on the discoveries and problems encountered by scientists in the limited field of origin of life research and proposes possible solutions. These discussions include characteristics of protoplanetary disks and their complex systems that appear more conducive to life's origin. The water paradox for the origin of life on Earth may be resolved on protoplanetary disks; the chiral preference for amino acids on Earth may have originated on protoplanetary disks. The molecular composition of protoplanetary disks may be more conducive to explaining the origin of life; the large number of organic molecules observed in cosmic dust may have originated on protoplanetary disks. The ultraviolet resistance of life on Earth may have originated in the protoplanetary disk. Life may have originated on protoplanetary disks through archaeological analysis of the Morrison and other meteorites. Analyze literature on the last universal common ancestor to explore the possibility that life originated on protoplanetary disks. Finally, model the possible origin of life on protoplanetary disks and explain the potential origin of life on protoplanetary disks. Discussions of the theoretical basis for the origin of life on protoplanetary disks are limited to theoretical hypotheses. Hopefully, these theoretical discussions will provide scientists engaged in the origin of life research with a new vision of the origin of life research. These discussions will contribute to the future development of the origin of life research.

Keywords : the origin of life, protoplanetary disk, biological evolution, the universe

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