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**Thresholds in Origin of Life Scenarios**

**Abstract**:

Thresholds are widespread in origin of life scenarios, from the emergence of chirality, to the appearance of vesicles, of autocatalysis, all the way up to Darwinian evolution. Here, we analyze the ‘‘error threshold,’’ which poses a condition for sustaining polymer replication, and generalize the threshold approach to other properties of prebiotic systems. Thresholds provide theoretical predictions, prescribe experimental tests, and integrate interdisciplinary knowledge. The coupling between systems and their environment determines how thresholds can be crossed, leading to different categories of prebiotic transitions. Articulating multiple thresholds reveals evolutionary properties in prebiotic scenarios. Overall, thresholds indicate how to assess, revise, and compare origin of life scenarios.