

Special Lecture

Prof. Dr. Jack W. Szostak

University of Chicago

Start Time: Wednesday, October 9, 2024 04:00 pm

End Time: Wednesday, October 9, 2024 07:00 pm

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RNA and the Origin of Life

Prof. Dr. Jack W. Szostak

University of Chicago

Nobel Laureate in Physiology or Medicine 2009

There are many reasons to think that Life began with RNA as its genetic and functional polymer, most notably the fact that all proteins in all cells are synthesized by the RNA components of the ribosome. But how did RNA-based Life emerge from the chemistry of the early Earth? Increasingly efficient and plausible pathways for the prebiotic synthesis of nucleotides and amino acids have been and are being worked out. However, many questions must be addressed to connect prebiotic synthetic chemistry to the origins of primitive Life. For example, can RNA copying and replication occur without enzymes, and if so, how? And how did the first ribozymes assemble from smaller RNA fragments? I will discuss recent progress on these and related questions.

Due to high demand, please register for our planning purposes using this link: <https://events.tu-berlin.de/de/events/01920a1e-a7fa-779d-9312-3c9e492600c9>

Prof. Dr. Matthias Drieß

Organizer