4th online GDCh Symposium @ Uni Regensburg
Montag 19. April 2021, 16.00 Uhr per ZOOM

Prof. Dieter Braun
Ludwig-Maximilians-Universität München
Systems Biophysics
Tracking the first steps of Life in non-equilibrium settings

Abstract:
How could life emerge on the early Earth? Our experiments probe the first steps of molecular evolution by non-equilibrium experiments. Typically, we used millimeter scaled temperature gradients, including tracking the effects of air-water interfaces. These settings accumulate molecules, select them for length, enable strand separation and allow continuous feeding through bulk solutions. Using sequencing, we see diverse pathways in sequence space that are able to create structure from randomness. These experimental findings make us better understand what are the pitfalls towards open ended evolution. In many cases still, these studies are still performed with the help of a protein, but we converge towards RNA only experiment, driven by hybridization, gravity, temperature and hopefully, autocatalysis.

ZOOM Link:
https://uni-regensburg.zoom.us/j/69837641337?pwd=YnJLQXEWRGIlZHvVXBWNk1CNXdhZz09
Meeting-ID: 698 3764 1337
Kenncode: 607983
Contact E-mail: robert.wolf@ur.de