

Cologne Evolution Colloquium

Tal Dagan

Christian-Albrechts-University Kiel

CRC 1310 Predictability in Evolution

The Darwinian fitness of extrachromosomal genetic elements

Plasmids are an important source of raw material for microbial genome evolution outside the mainstream of bacterial chromosomes. Nonetheless, many plasmids found in nature are lacking a clear trait that is advantageous to their host; the determinants of plasmid evolutionary success in the absence of plasmid benefit to the host remain understudied. Borrowing terminology from evolutionary biology of cellular living forms, we hypothesize that Darwinian fitness is key for the plasmid evolutionary success. In this talk I will present recent results from my group on the determinants of plasmid fitness, and how plasmid fitness might change depending on the environmental conditions.

Wednesday, April 13, 2022, 17:00

Institute for Biological Physics

Zülpicher Str. 77a, Room 0.02 and via Zoom

Hosted by Berenike Maier