

Theorie-Kolloquium SS 2022 Fr 03.06.2022, 14:00-15:30 Online (URL in E-Mail)

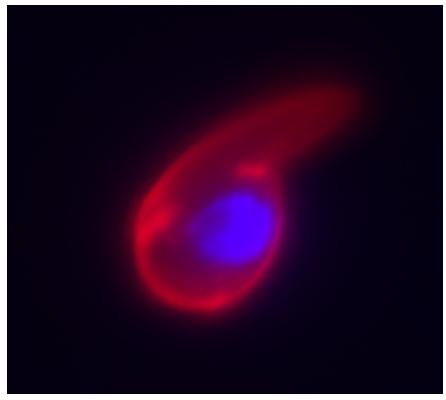


Offen im Denken

The first 24 hours of the malaria parasite inside the mosquito

Dr. Angelo Valleriani

Max-Planck-Institut für Kolloid- und Grenzflächenforschung, Potsdam



A cell of the malaria parasite after extraction from an infected mosquito

The malaria parasite Plasmodium falciparum is ingested by the mosquito of the species Anophele, when the mosquito gets a blood meal from an infected host. Inside the mosquito, the parasite's first 24 hours show a set of genetic and morphological transformations in order to escape the deadly environment of the mosquito gut during blood digestion. The group of E. Levashina at the MPI for Infection Biology in Berlin has produced fascinating and highly quantitative experimental data of this process that seems to be one of the weakest points of the parasite's life cycle. In this talk I will describe this process and show the data. Furthermore, I will discuss a mathematical model that recapitulates this process and produces various estimates of the time distributions involved in the process.