Oberseminar Stochastik

Im Rahmen des Oberseminars Stochastik wird

Dr. Marco Seiler
(Frankfurt Institute for Advanced Studies, Goethe-Universität Frankfurt)

am

Dienstag, den 6. Februar 2024

über das Thema

"SPATIAL INVASION OF COOPERATIVE PARASITES"

vortragen.

Abstract: We consider a host-parasite model in a spatially structured host environment, where parasites need to cooperate to successfully invade a new host. This model is in particular motivated by the biological application of a phage population invading a bacterial host population. It was found, that certain defence mechanisms of phages against the immune system of their bacterial hosts rely on cooperation of phages. We identify the spatial scale at which invasion of parasites turns from being an unlikely to a highly probable event and give in the critical regime upper and lower bounds on the invasion probability and study the time until a the invasion of the host population concluded.

This talk is based on joint work with Vianney Brouard, Cornelia Pokalyuk and Hung Tran.

Der Vortrag findet um **14:15 Uhr (Dauer max. 1 Stunde)** im Raum **30.03.007** statt. Alle Interessenten sind herzlich eingeladen!

gez.:
Prof. Dr. Markus Bibinger
PD Dr. habil. Anton Klimovsky