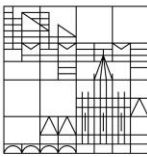


Physikalisches Kolloquium

Universität
Konstanz



Do 10.06.21
15:15 Uhr

Zoom-Meeting:

[https://zoom.us/j/94209674380
?pwd=dGJEB0NkRlcxcERYN0
crU3NITUMyZz09](https://zoom.us/j/94209674380?pwd=dGJEB0NkRlcxcERYN0crU3NITUMyZz09)



Dr. Katja Taute

Harvard University, Cambridge, USA

More is different:

High-throughput 3D tracking reveals microbial navigation strategies

How microbes navigate their environment has implications that range from health to climate change. We use high-throughput 3D tracking of bacteria to investigate behavioral strategies that drive navigation relative to chemical gradients, chemotaxis. We find that individual *E. coli* cells differ dramatically in chemotactic performance, reveal the underlying navigation strategies, and show that interplay between hydrodynamics and behavioral strategy can result in an inversion of the direction of chemotaxis.

