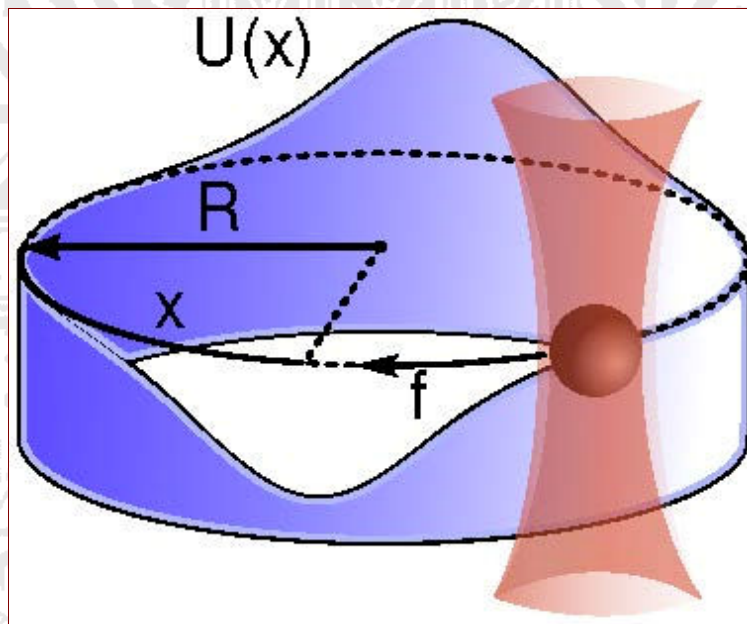




# SONDERKOLLOQUIUM

AM 16. SEPTEMBER UM 9:30 UHR

IM HÖRSAAL II IM PHYSIKHOCHHAUS



## Statistical Physics far from Thermal Equilibrium: Foundations and Applications

PROF. DR. THOMAS SPECK

*INSTITUT FÜR PHYSIK*

*JOHANNES GUTENBERG UNIVERSITÄT MAINZ*

Stochastic thermodynamics constitutes a theoretical framework for systems driven away from thermal equilibrium, in particular in the presence of strong fluctuations. Quantities like work and heat become stochastic with probability distributions, which, however, are not arbitrary but restricted by fluctuation theorems. After a brief introduction to stochastic thermodynamics I will discuss an exciting new class of soft matter systems, self-phoretically driven colloidal particles, and show what can be learned about these systems from stochastic thermodynamics.