

Institut für Physik

Theoriekolloquium

Am 9. Mai 2019 um 14.15 Uhr in W2 1-143 hält

Herr Prof. Dr. Peter Sollich (Göttingen)

einen Vortrag mit dem Titel

Bringing together two paradigms of non-equilibrium: Driven dynamics of aging systems

Non-equilibrium behaviour can be broadly split into two categories. The first is aging, where a system can in principle reach an equilibrium state but its slow dynamics leads to extremely long transients during which the properties of the system depend on its age since preparation.

In the second category are driven systems, whose dynamics breaks detailed balance leading to non-equilibrium steady states. An attractive way of constructing descriptions of such driven systems is based on maximum entropy arguments in trajectory space, leading to so-called biased trajectory ensembles.

In this talk I will describe how these two non-equilibrium scenarios interact, by studying the bias-driven dynamics of two simple models that are inspired by the physics of glasses and exhibit aging at low temperatures. The analysis allows one to reveal dynamical phase transitions, which are related to unexpected qualitative differences in the robustness of aging to additional driving.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Andreas Engel