

## Theoriekolloquium

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Am **2. Mai 2024 um 14.15 Uhr** in **W2 1-143** hält

**Herr Prof. Dr. James Anglin (Kaiserslautern)**

einen Vortrag mit dem Titel

### **HOW TO CAPTURE A DAEMON IN A LINEAR ION TRAP and make it tell us about microscopic thermodynamics**

The microscopic roots of thermodynamics are still obscure, but something must govern the efficient microscopic machinery that runs inside all our cells, where reactions on picosecond time scales power motions of large proteins over microseconds. As a contribution from theoretical physics, we study simple models for this kind of cross-timescale power transfer - and find constraints from post-adiabatic mechanics that resemble thermo-dynamics surprisingly closely. To demonstrate these micro-thermodynamical principles, we propose a set of experiments in which a single trapped ion will become a Hamiltonian daemon.

Interessierte sind herzlich eingeladen.

gez. Prof. Dr. Martin Holthaus