Symposium Micromachines (SYMM)

jointly organized by
the Atomic Physics Division (A) and
the Quantum Optics and Photonics Division (Q)

Eric Lutz
Institut für Theoretische Physik
Universität Erlangen-Nürnberg
Staudtstr. 7
91058 Erlangen
eric.lutz@fau.de

Ferdinand Schmidt-Kaler
QUANTUM, Institut für Physik
Universität Mainz
Staudingerweg 7
55128 Mainz
fsk@uni-mainz.de

There has recently been a surge of experimental and theoretical research devoted to the realization of micro and nanoscale machines, from heat engines to refrigerators. The main topic of this symposium is to present a detailed overview of the latest achievements in the field. It will cover a large variety of experimental platforms and theoretical models used to analyze the performance and the influence of both thermal and quantum effects.

Overview of Invited Talks and Sessions

(Lecture room RW HS)

Invited Talks

SYMM 1.1	Fri	13:30–14:00	RW HS	**Some experimental contributions to the study of thermodynamics in quantum systems.** — •Ian Walmsley
SYMM 1.2	Fri	14:00–14:30	RW HS	**Levitated Nanoparticle Micromachines** — •Nikolai Kiesel
SYMM 1.3	Fri	14:30–15:00	RW HS	**Autonomous quantum machines and timekeeping** — •Marcus Huber
SYMM 1.4	Fri	15:00–15:30	RW HS	**An autonomous thermal machine for amplification of coherence** — •Juan MR Parrondo, Gonzalo Manzano, Ralph Silva

Sessions

SYMM 1.1–1.4 Fri 13:30–15:30 RW HS **Micromachines**