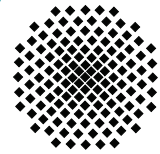


# Stuttgarter Physikalisches Kolloquium

Max-Planck-Institut für Intelligente Systeme  
Max-Planck-Institut für Festkörperforschung  
Fachbereich Physik, Universität Stuttgart

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Dienstag, 20. Mai 2014

17.15 Uhr

Hörsaal 2 D5

Stuttgarter Max-Planck-Institute, Heisenbergstraße 1, 70569 Stuttgart-Büsnau

Gastgeber: Prof. Siegfried Dietrich, Max-Planck-Institut für Intelligente Systeme, Telefon: 0711 - 689-1920

## Levitation by Casimir forces in and out of equilibrium

**Mehran Kardar**

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### Abstract

A generalization of Earnshaw's theorem constrains the possibility of levitation by Casimir forces in equilibrium. The scattering formalism, which forms the basis of this proof, can be used to study fluctuation-induced forces for different materials, diverse geometries, both in and out of equilibrium. In the off-equilibrium context, I shall discuss non-classical heat transfer, and some manifestations of the dynamical Casimir effect.