



**Sächsische Forschergruppe**

***„From Local Constraints  
to Macroscopic Transport“***

**On Wednesday May 11th, 2011, at 9:00**

in the Small auditory of the Faculty of Physics and Geosciences,  
Institute of Theoretical Physics, *Vor dem Hospitaltore 1*, Leipzig

**Dr. Ralf Eichhorn**

**will speak on the topic of**

***„Directing Brownian motion: Negative mobility and beyond “***

The movement of a Brownian particle in a symmetric, periodic potential landscape under the influence of external driving forces is considered, and the response to a small static perturbation is studied. We show that quite unusual transport properties may arise. Specifically, average particle motion opposite to the static force (negative mobility) is observed. An intuitive explanation of the underlying physical mechanism, experimental realizations, and generalizations of this effect are presented.

***You are cordially invited to attend.***

**Frank Cichos**

**Klaus Kroy**