

Eugene Wigner Colloquium

joint event of GRK 1558 and SFB 910



Prof. Haye Hinrichsen

Universität Würzburg, Germany

“Critical Phenomena in Systems with Long-Range Couplings”

Continuous phase transitions in equilibrium and non-equilibrium systems are known to exhibit universal properties. This means that quantities such as critical exponents and scaling functions depend only on the dimensionality and essential symmetry properties of the system while they are independent of microscopic details. The talk addresses the question to what extent the universal properties change in the presence of long-range interactions both in space and in time. In particular we are interested in interactions with a power-law characteristics, also known as Levy flights. Giving a general introduction to the theoretical key concepts we discuss the question of universality and the physical implications caused by long-range interactions in critical systems.

M. Bär

Thursday, 05.02.15 · 16:15h · EW 202

Technische Universität Berlin · Institut für Theoretische Physik · Hardenbergstraße 36 · 10623 Berlin

www.itp.tu-berlin.de/grk1558 · www.itp.tu-berlin.de/sfb910

