

EINLADUNG

zum Vortrag
von

Priv. Doz. Dr. Andreas Tröster
Technische Universität Wien, Soft Matter Theory

Old and New in $d=2$: New Monte Carlo Approaches To Interfaces, Membranes and Criticality

am

Dienstag, 9. April 2013, um 17:30 Uhr

Ort: Lise-Meitner-Hörsaal, Fakultät für Physik, Universität Wien,
1090 Wien, Strudlhofgasse 4 / Boltzmannngasse 5, 1. Stock

Barrierefreier Zugang: Boltzmannngasse 5, Lift, 1. Stock rechts über den Gang zum Hintereingang des Hörsaals

Abstract:

In this talk I intend to give a review of some of my recent work on the physics of low dimensional systems. Our tour will take us from analyzing the curvature dependence of the interface tension between coexisting fluid phases at first order phase transitions to studying the elastic properties of solid and hexatic membranes, and further to following Wilson's momentum shell renormalization group prescription step by step in simulation. Even though the choice of topics may appear to be quite diverse, I will show that the concepts of curvature and elasticity of low-dimensional structures in combination with statistical mechanics, scaling and the Monte Carlo method provide a common denominator.

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Vorsitzender 2012/13: Ao.Univ.Prof.Dipl.Ing.Dr. Thomas Prohaska, Analytische Chemie, Universität für Bodenkultur, Wien