



"Soft-Matter Seminar"

Dr. Matthias Schmidt

Department of Physics, University of Bristol, United Kingdom

Title:

Interfacial properties of colloidal platelet dispersions

Abstract:

Dispersions of sub-micron sized platelets in an organic solvent constitute excellent model systems to study a wide range of interfacial phenomena in liquid crystals. After a brief introduction to colloidal dispersions, I focus on recent theoretical work on a model for hard colloidal platelets, covering the wetting behaviour of the nematic phase at a substrate, influence of an external magnetic field on the isotropic-nematic phase transition and capillary phase behaviour. Some of the findings are compared to results from extensive Monte Carlo simulations and from experiments on dispersions of sterically stabilized Gibbsite platelets adsorbed at a glass wall.

Dienstag, den 17.04.2007
16:00 Uhr
Raum PH 3344

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