

EINLADUNG

zum Vortrag

von

Prof. Dr. Christos N. Likos
Institut für Theoretische Physik II,
Heinrich-Heine Universität Düsseldorf

über

When Physics meets Chemistry: playing with soft matter

am

Dienstag, dem 12. Oktober 2004, um 17.30 Uhr
im Großen Hörsaal des Instituts für Experimentalphysik der Universität Wien
1090 Wien, Strudlhofgasse 4 / Boltzmannngasse 5, 1. Stock

Abstract:

The tremendous progress in organic chemistry has enabled us to synthesize an enormous variety of polymer-based macromolecules, possessing a host of different (and tunable) architectures. Refinements in scattering methods, as well as advances in other physicochemical experimental techniques that probe the structure of the macromolecules and of their concentrated suspensions, have shed light into the self-organizing mechanisms of soft matter. Theoretical physicists have, in the last two to three decades, joined the effort to understand the properties of these materials, aided by the development of appropriate statistical-mechanical theories and by the calculational power of modern computers. The talk will offer an overview of some of the most common problems in soft matter science and an account of recent progress relating to the specific systems of star polymers and microgels that display unexpected macroscopic behavior.

CHEMISCH-PHYSIKALISCHE GESELLSCHAFT

c/o Institut für Experimentalphysik der Universität Wien, A-1090 Wien, Strudlhofgasse 4
Sekretär: Ao.Univ.Prof. Dr. Georg REISCHL
Tel.: +43-(0)1-4277/51153, 51108 - Fax: 4277/9511 - Email: CPG@exp.univie.ac.at - <http://www.cpg.univie.ac.at>
Präsident 2003/04: Ao.Univ.Prof. Dr. Gerhard KAHL
Institut für Theoretische Physik der Technischen Universität Wien