



EINLADUNG

zum

VERA-SEMINAR

von

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Wegen Terminkollision auf
11. November verschoben!!!

Glass transitions in polymer mixtures

Soft matter is characterized by the simultaneous presence of many physical components in solution, whereby the solvent is typically of microscopic extension but the dissolved particles are mesoscopic macromolecular aggregates. This discrepancy in the length scales, which also implies a corresponding asymmetry in the time scales of the relevant physical processes, confronts us with the formidable challenge to devise suitable theoretical tools to properly coarse-grain the complex systems at hand. In this talk, I will first offer a general introduction to the topic and then focus on a problem of high topical interest, namely the dynamical arrest of soft, polymer-based systems, also known as *glass formation*. By employing suitably developed statistical mechanical tools, in conjunction with the coarse-graining approaches, I will discuss some unexpected scenarios pertaining to the possibilities to manipulate the rheological state of soft mixtures and to characterize those by means of theoretical tools that allow a one-to-one correspondence with experimental measurements.

Donnerstag, 11. November 2010, 16:30 Uhr

**1090 Wien, Währinger Str. 17, "Kavalierstrakt",
1. Stock, Victor-Franz-Hess Hörsaal**