

Einladung zum
Mathematischen Kolloquium

Julius-Maximilians-Universität Würzburg • Fakultät für Mathematik und Informatik

Prof. Dr. Chun Liu

Penn State University, USA

**Energetic variational approaches in
complex fluids**

Mittwoch, den 9. Mai 2012 • 16:15 Uhr
Mathematik Ost (Emil-Fischer-Straße 40), Seminarraum SE40 (Raum 00.001)

Inhaltsangabe.

The talk is on the mathematical theories, in particular the energetic variational approaches, of anisotropic complex fluids, such as viscoelastic materials, liquid crystals and polymeric fluids. Complex fluids, including mixtures and solutions, are abundant in our daily life. The complicated phenomena and properties exhibited by these materials reflects the coupling and competition between the microscopic interactions and the macroscopic dynamics. We study the underlying energetic variational structures that is common among all these multiscale-multiphysics systems. In this talk, I will demonstrate the modeling as well as analysis and numerical issues arising from various complex fluids.



www.mathematik.uni-wuerzburg.de/kolloquium.html

Zu diesem Vortrag laden wir Sie herzlich ein.
Kaffee und Tee wird unmittelbar nach dem Vortrag gereicht.

Die Dozentinnen und Dozenten der Mathematik

