数学与系统科学研究院

计算数学所学术报告

报告人:　　**Prof. Jie Shen**

　　　　　　(Purdue University, U.S.A)

报告题目:　**Modeling and simulation of multiphase complex fluids using an energetic variational phase field model**

邀请人:　　袁礼研究员

报告时间:　2008 年 11 月 27 日(周四)

　　　　　　下午 4:00—5:00

报告地点:　科技综合楼三层 311

　　　　　　计算数学所报告厅

Abstract:

I shall present an energetic variational phase field model for multiphase incompressible flows which leads to a set of coupled nonlinear system consisting a phase equation and the Navier–Stokes equations. I shall present efficient and accurate numerical schemes for solving this coupled nonlinear system, and show ample numerical results (drop formation and pitching–off, bubble rising in a polymeric fluid, defect motion in a liquid crystal flow, etc.) which not only demonstrate the effectiveness of the numerical schemes, but also validate the flexibility and robustness of the phase–field model.

欢迎大家参加！