

数学与系统科学研究院

计算数学所学术报告

报告人: **Dr. Xiaofeng Yang**

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报告题目:

**Modeling and simulations of  
multi-phase complex  
fluids (MCFs) with phase-field  
approach**

邀请人: 于海军博士

报告时间: **2011 年 7 月 21 日 (周四)**

**上午 10: 00**

报告地点: **科技综合楼三层 311**

**计算数学所报告厅**

## **Abstract:**

**We proposed a set of modeling and simulation tools to model the system of Multi-phase complex fluids (MCFs) using the energetic phase-field approach. We have developed a series of robust, energy stable and accurate numerical schemes to simulate the coupled PDEs system. The rigorous stability and error estimates are obtained therefore. Some benchmark experiments are compared with our numerical simulations qualitatively and quantitatively showing the advantage of our models.**

**欢迎大家参加!**