

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Qiang Du**

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报告题目:

**Asymptotically compatible  
discretizations of nonlocal models  
and their local limits**

邀请人: 明平兵 研究员

报告时间: **2014 年 8 月 14 日 (周四)**

**下午 16:00-17:00**

报告地点: **数学院南楼 702  
会议室**

## **Abstract:**

**Nonlocality is ubiquitous in nature and is a generic feature of model reduction of complex systems. Nonlocal models and nonlocal balance laws are attractive alternatives to treat anomalous processes and singular behavior. We present the framework of asymptotically compatible discretizations for parametrized variational problems associated with nonlocal models that provide convergent approximations in the nonlocal setting and in the local limit. These methods allow consistent and robust simulations of problems involving multiple scales and are helpful in the validation of nonlocal models and simulations in physical applications.**

**欢迎大家参加!**