

**数学与系统科学研究院**

**计算数学所学术报告**

**报告人: Prof. Jack Xin**

**(University of California at Irvine)**

**报告题目:**

**Front speeds of non-coercive  
Hamilton–Jacobi equation in multi-  
scale media**

**邀请人: 周爱辉研究员**

**报告时间:**

**2009年8月5日(周三)**

**上午 10:00—11:00**

**报告地点: 科技综合楼三层 311**

**计算数学所报告厅**

## Abstract:

Front speeds in multiscale media are related to homogenization of Hamilton–Jacobi (HJ) equations. We show several models in applications where the Hamiltonian functions are non-coercive, violating a standard assumption in HJ homogenization. We illustrate new phenomena of front speedup and slowdown in these models, including the well-known G-equation in turbulent combustion, by obtaining asymptotic speed bounds.

**欢迎大家参加！**