

数学与系统科学研究院
计算数学所学术报告

报告人: **Prof. Eric T Chung**

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报告题目:

Local multiscale model reduction

邀请人: 张文生 研究员

报告时间: 2017 年 8 月 11 日 (周五)

上午 10:00-11:00

报告地点: 数学院南楼九层

902 报告厅

Abstract:

Many practical applications involve solutions of PDE with highly oscillatory and high contrast coefficients. Solving them by traditional approaches require large amount of computer time and memory, and some type of model reductions are therefore necessary. In the design of localized reduced models, one challenge is to construct local modes that can capture longer range effects, which are due to, for example, high contrast channels in the domain. We have developed a new methodology to construct such local modes, and the idea is based on a constraint energy minimization principle. We show that, our approach gives a convergence rate depending only on the mesh size, but independent of the heterogeneous coefficient.

欢迎大家参加！