

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Hui Zheng**

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报告题目:

**Multiscale simulation for the elastic
and poroelastic wave equations**

邀请人: 张文生 研究员

报告时间: **2017 年 8 月 10 日 (周四)**

下午 15:00-16:00

报告地点: **数学院南楼七层**

702 教室

Abstract:

We propose a multiscale simulation method for the elastic wave equation and Biot equation in the heterogeneous media. This method firstly computes the local basic functions on the fine mesh by the multiscale finite element methods, then computes on the coarse mesh through these local basic functions by a method like the stagger grid method. In the numerical experimentations, we use the perfectly matched layers (PML) boundary conditions. The numerical results show that the multiscale method proposed in this paper can both catch the information on the fine scale and save the cost of computations.

欢迎大家参加！