

数学与系统科学研究院

计算数学所学术报告

报告人: 董巧丽 副教授

(中国民航大学理学院)

报告题目:

Multiscale Algorithms for the Wave Equations in Perforated Domains

邀请人: 曹礼群 研究员

报告时间: 2016 年 4 月 8 日 (周五)

下午 14:30-15:30

报告地点: 数学院南楼五层

514 会议室

Abstract:

In this talk, we introduce the multiscale asymptotic method and hole-filling method for the wave equation in a perforated domain. Firstly, The multiscale asymptotic expansion of the solution are constructed and associated explicit convergence rate are obtained. Secondly, the hole-filling method through filling all holes with a very compliant material is introduced. Based on the above hole-filling method, the multiscale asymptotic method and the convergence results for the associated multiphase problem in a domain without holes are presented. The numerical experiments are carried out to validate the theoretical results.

欢迎大家参加！