

数学与系统科学研究院  
计算数学所网络学术报告

报告人: **Prof. Jianfeng Lu**

( *Duke University* )

报告题目:

**Optimal artificial boundary  
condition for random elliptic media**

邀请人: 明平兵 研究员

报告时间: **2020 年 12 月 10 日 (周四)**

**上午 10:00-11:00**

报告工具: **腾讯会议 (ID: 779 830 210)**

## 摘要:

**We will discuss some recent works on artificial boundary conditions for elliptic equations with stationary and finite-range random media and localized right-hand side. In particular, we will discuss algorithms in 2D and 3D that only utilize the information of the random media within a finite computational domain. The algorithms we proposed are optimal, in the sense that the error bound matches the order of fluctuation of the solution conditioned on the prescribed media. (Based on joint work with Felix Otto and Lihan Wang)**

**欢迎大家参加!**