

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Jinbiao Wu**

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报告题目:

**Multigrid methods for nearly
singular problems**

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报告时间: **2016 年 11 月 18 日 (周五)**

上午 9:00-11:00

报告地点: 数学院南楼二层

202 教室

Abstract:

There are abundant examples that fall into the category of nearly singular problem like the nearly incompressible elasticity problems, jump coefficient problems, and $H(\text{div})$ and $H(\text{curl})$ systems. We developed a transparent framework on the iterative methods for the nearly singular problems. Under minimal assumptions, we proved the parameter independent convergence of the related multilevel methods. We applied the framework to study the planar elasticity problems and the jump coefficient problems, and constructed the robust multigrid methods for some discretizations of these two problems.

欢迎大家参加！