

数学与系统科学研究院

计算数学所学术报告

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报告题目:

**Preconditioners based on the  
Schilders factorization for structure  
matrices**

邀请人: 白中治研究员

报告时间: **2011 年 8 月 17 日 (周三)**

**上午 10: 30-11: 30**

报告地点: **科技综合楼三层 311**

**计算数学所报告厅**

## **Abstract:**

**In this talk, we will consider the preconditioned iterative methods for the system of linear equations arising from the discrete PDE-constrained optimization. Based on the Schilders factorization, we present a class of incomplete factorization preconditioners. The spectral properties of the preconditioned matrix are considered. By reducing the original problem to an equivalent two-by-two block system, we also consider the block triangular and constraint preconditioners. Numerical experiments will be given to illustrate the behaviors of different preconditioners.**

**欢迎大家参加!**