

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:

**On Eigenvalue Embedding Problem**

邀请人: 白中治 研究员

报告时间: 2013 年 5 月 25 日 (周六)

下午 15:30-16:30

报告地点: 科技综合楼三层 301

计算数学所小报告厅

## **Abstract:**

The talk concerns the eigenvalue embedding problem of undamped gyroscopic system. Based on a low-rank correction, the presented approach moves the unwanted eigenvalues to desired values and the remaining eigenvalues and eigenvectors of the original system do not change. In addition, the structures of mass matrix, stiffness matrix, and gyroscopic matrix are all preserved. Using the freedom of the eigenvectors, an expression of parameterized solutions to the eigenvalue embedding problem is derived, and a minimum modification algorithm for solving the eigenvalue embedding problem is proposed. A numerical example is given to show the application of the proposed method.

This is a joint work with Xiao-Bin Mao

欢迎大家参加!