

数学与系统科学研究院
计算数学所定期学术报告

报告人: **Dr. Shuo Zhang**

(*LSEC, Institute of Computational Mathematics and Scientific/Engineering Computing, Academy of Mathematics and Systems Science Chinese, Academy of Sciences*)

报告题目:

Some nonconforming finite element methods for fourth order problems

报告时间: **2012 年 3 月 29 日(周四)**

下午 16: 00~17: 00

(15: 30~16: 00 茶歇)

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 discuss the nonconforming finite element methods for fourth order problems. Nonconforming finite element methods seek spaces of piecewise polynomials that do not necessarily be a subspace of certain Sobolev spaces. This allows us to establish convergent finite element methods with fewer degrees of freedom than conforming ones. We will first introduce several families of finite element methods, whereas the unified formulation of the finite element methods is established for arbitrary dimensions. Then we introduce the technique to analyze their convergence, and discuss the establishment of finite element methods of specific types.

Both classical and new results are contained in this talk. Some of them are obtained by the speaker or his co-workers.

欢迎大家参加!