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:

HYBRID FINITE VOLUME/FINITE ELEMENT METHODS FOR LINEAR ELASTICITY PROBLEMS

邀请人： 明平兵研究员

报告时间：2011 年 1 月 12 日（周三）

下午 16：00～17：00

报告地点： 科技综合楼三层 311

计算数学所报告厅

<u>Abstract</u>：

This talk is to introduce a coupling approach of finite element and finite volume for linear elasticity problems. A hybrid stress quadrilateral finite element discretization is used for the constitutive equation with continuous piecewise isoparametric bilinear displacement interpolation and two types of stress modes, and a finite volume formulation is used for the equilibrium equation. The resultant methods are free from Poisson locking in the sense that the error bounds in the a priori estimates are independent of the relevant Lame constant λ. Numerical experiments confirm the theoretical results.

欢迎大家参加！