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： Immersed finite element methods for elliptic interface problems with non−homogeneous jump conditions

邀请人： 曹礼群研究员

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上午 10:00—11:30

报告地点： 科技综合楼三层 311

计算数学所报告厅

Abstract：

This talk concerns the development of

immersed finite element (IFE) functions for solving second order elliptic boundary value problems with discontinuous coefficients and non–homogeneous jump conditions. These IFE functions can be formed on meshes independent of interface. Numerical examples demonstrate that these IFE functions have the usual approximation capability expected from polynomials employed. The related IFE methods based on the Galerkin formulation can be considered as natural extensions of those IFE methods in the literature developed for homogeneous jump conditions, and they can solve the interface problems with a nonhomogeneous flux jump condition.

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