数学与系统科学研究院

计算数学所学术报告

报告人： 魏华炜 副教授

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报告题目：

An interface-fitted mesh generator and finite element methods for elliptic interface problems in two and three dimensions

邀请人： 黄记祖 博士

报告时间：2015 年 12 月 23 日（周三）

上午 10:30~11:30

报告地点： 科技综合楼三层

311 报告厅

Abstract：

In this work, we developed a simple interface-fitted mesh algorithm which can produce interface-fitted mesh in two and three dimension quickly. In the 3D interface-fitted mesh, most elements are small cubes and only the elements near the interface are general polyhedra with tirangle or square faces. On such interface-fitted mesh, we can avoid the sliver problem of tetrahedron mesh and use the virtual element method, which is the generalization of standard FEM on polygon or polyhedron, to solve the elliptic interface problem. Finally, we present some numerical results to confirm the effectiveness of our method.

欢迎大家参加！