数学与系统科学研究院

计算数学所学术报告

报告人：**Assistant Prof. Xianping Li**

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报告题目：

Anisotropic Mesh Adaptation in Numerical Computations: Methods and Applications

邀请人： 许现民 副研究员

报告时间：**2019 年 6 月 24 日（周一）**

上午 10:00-11:00

报告地点： 科技综合楼三层

305 会议室

Abstract：

Anisotropic mesh adaptation (AMA) has been successfully applied to improve computational efficiency and accuracy when solving differential equations. In some circumstances, unphysical solutions (artifacts) may occur if regular meshes are used in the computations. In this talk, I will present the M-uniform mesh approach and describe two different implementation methods for anisotropic mesh adaptation. One method uses mesh generators to construct the meshes according to the computed metric tensors. The other method is called the Moving Mesh PDE (MMPDE) method that moves the mesh nodes according to the minimization of an energy functional. Numerical results in different applications will be presented.

欢迎大家参加！