

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:

**Construction of Subdivision  
Geometric PDE Surfaces**

邀请人: 徐国良研究员

报告时间: **2010年7月15日(周四)**

**下午 2: 00**

报告地点: **科技综合楼四层 401**

**计算数学所教室**

## **Abstract:**

**Subdivision technology has always been active in computer aided design since its invention. The flexibility and high quality of subdivision surfaces makes them a powerful tool in geometry modeling and surface designing. We use the mean curvature flow(a second-order geometric flow), surface diffusion flow, Willmore flow and quasi-surface diffusion flow(forth-order geometric flows) to construct minimal Loop(Catmull-Clark's)subdivision surfaces with specified B-spline boundary curves and subdivision surfaces with specified  $G^1$  boundary conditions. These flows are solved by a finite element method where the finite element space is spanned by the limit functions of the modified Loop(Catmull-Clark's) subdivision scheme.**

**欢迎大家参加!**