

数学与系统科学研究院

计算数学所学术报告

报告人: Prof. Xianfeng Gu

( 美国纽约大学石溪分校 )

报告题目:

**Discrete Surface Uniformization,  
Theory and Algorithms**

邀请人: 袁亚湘 院士

刘歆 副研究员

报告时间: 2015 年 11 月 3 日 (周二)

下午 15:30-16:30

报告地点: 科技综合楼三层

311 报告厅

## Abstract:

Surface uniformization theorem plays a fundamental role in surface differential geometry, which states that any Riemannian metric on a closed surface can be conformally deformed to the one with constant Gaussian curvature. In this talk, the uniformization theorem is generalized to the discrete surfaces. The proofs for the existence, uniqueness of the solution will be explained. When the tessellation is refined, the discrete uniformization converges to the smooth solution. The computational algorithms will be explained, and some applications will be demonstrated.

欢迎大家参加！