

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Xianfeng David Gu**

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报告题目:

**A Geometric View of Optimal  
Transportation, theory, algorithm  
and applications**

邀请人: 陈冲 博士

报告时间: 2019 年 6 月 12 日 (周三)

下午 15:00-16:00

报告地点: 科技综合楼三层

311 报告厅

## Abstract:

Optimal transportation plays a fundamental role in medical imaging and deep learning. It is the intersection of probability, differential geometry and partial differential equation. In this talk, we discuss the intrinsic relation among optimal transportation map, Alexandroff theorem in convex geometry and Monge-Ampere equation. A variational proof for Alexandroff theorem will be given, and a geometric algorithm based on convex optimization will be explained. Some applications in medical imaging and generative adversarial networks (GANs) will be discussed as well.

**欢迎大家参加！**