

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Brittany Froese**

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报告题目:

**Applications of Optimal Transport  
and the Wasserstein Metric**

邀请人: 赵旭鹰 博士

报告时间: 2017 年 6 月 14 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:**

The problem of finding the most cost-efficient rearrangement of one distribution into another dates back to the eighteenth century. The optimal cost also yields a metric between the two densities, known as the Wasserstein metric. In recent years, this optimal transportation has found application in numerous fields. We review several of these applications, with particular focus on problems in geometric optics and seismic full waveform inversion. We describe several important properties of optimal transport maps and the Wasserstein metric that explain the widespread applicability of optimal transportation methods.

## **报告人简介:**

B. Froese 教授 2012 年毕业于加拿大 Simon Fraser University。之后在 The University of Texas at Austin 做博士后。2015 年就职于 New Jersey Institute of Technology。她最近在优化输运领域中有一些重要工作，包括 Monge-Ampere 方程的数值求解, Wasserstein 度量的应用等方面。

**欢迎大家参加!**