

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Ming-Jun Lai**

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报告题目:

Compressive Sensing for Graph Clustering

邀请人: 许志强 研究员

报告时间: **2019 年 12 月 13 日(周五)**

上午 10:00-11:00

报告地点: **科技综合楼三层**

311 报告厅

Abstract:

This talk is based on a joint work with Daniel Mckenzie. We will explain how to phrase the cut improvement for graphs as a sparse recovery problem, whence one can use algorithms originally developed for compressive sensing (such as SubspacePursuit to solve it. We show that this approach to cut improvement is fast, both in theory and practice and moreover enjoys statistical guarantees of success when applied to graphs drawn from probabilistic models such as the Stochastic Block Model. We then propose new methods for local clustering and semi-supervised clustering, which enjoy similar guarantees of success and speed. Finally, we demonstrate our approach with extensive numerical benchmarking.

欢迎大家参加！