

数学与系统科学研究院
计算数学所网络学术报告

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报告题目:

**Low Rank Matrix Recovery for
Seismic Data Analysis and Blind
Superresolution**

邀请人: 张旭 博士后

报告时间: 2023 年 2 月 27 日 (周一)

上午 10:00-10:40

报告工具: 腾讯会议 ID: 631-826-671

Abstract:

Low rank matrix recovery is about reconstructing a low rank matrix from incomplete measurements. It arises frequently in many research areas of science and engineering, for example, machine learning, signal processing and computer vision. Low rank matrix recovery has received extensive investigations from the theoretical and algorithmic aspects during the last decade.

In this talk, we will discuss the low rank matrix completion problem for seismic data analysis and the low rank matrix sensing problem for blind superresolution of point sources. The target matrices associated with these problems are not only low rank, but also are highly structured. Convex approaches are proposed for the corresponding low rank matrix recovery problems. Theoretical guarantees will be established, showing that nearly optimal sample complexity suffices for successful recovery.

个人简介:

陈金池，复旦大学博士后。2019 年博士毕业于北京理工大学，2019 年至今在复旦大学大数据学院从事博士后研究工作。研究方向为压缩感知和强化学习。多篇论文发表在在 IEEE TIT、IEEE TSP、ACHA 等国际知名期刊。

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