数学与系统科学研究院

计算数学所学术报告

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报告题目：

Signal and matrix recovery with correlated measurements

邀请人：　许志强 研究员

报告时间：**2019** 年 **8** 月 **27** 日（周二）

下午 **14:00-15:00**

报告地点：　数学院南楼二层

226 教室

Abstract:

Restricted Isometry Property (RIP) is widely used in compressed sensing and matrix recovery. However, in practice, we often come across high-dimensional data from random or deterministic measurements with correlated entries. Here we analyze data recovery from correlated measurements with suitable tools instead of RIP. In compressed sensing, we introduce the restricted eigenvalue condition adapted to frame D for several classes of correlated matrices, and get the error bounds in the analysis LASSO and the analysis Dantzig Selector under sparse scenario. Besides, we discuss multichannel blind deconvolution problem which can be considered as matrix recovery problem by lifting method. Under deterministic subspace assumption, the measurements are highly correlated and RIP is violated. We derive tight condition for signal recovery, and present a non-convex algorithm with theoretical stability result.

欢迎大家参加！