数学与系统科学研究院

计算数学所学术报告

报告人： 支丽红 研究员

（ 中科院系统科学研究所 ）

报告题目：

Numerical Sparsity Determination and Early Termination

邀请人： 许志强 研究员

报告时间： 2016 年 12 月 5 日（周一）

上午 11:00-12:00

报告地点： 科技综合楼三层

311 报告厅

Abstract：

Ankur Moitra in his paper at STOC 2015 has given an in-depth analysis of how oversampling improves the conditioning of the arising Prony systems for sparse interpolation and signal recovery from numeric data. Moitra assumes that oversampling is done for a number of samples beyond the actual sparsity of the polynomial/signal. We give an algorithm that can be used to compute the sparsity and estimate the minimal number of samples needed in numerical sparse interpolation. The early termination strategy of polynomial interpolation has been incorporated in the algorithm: by oversampling at a small number of extra sample points we can diagnose that the sparsity has not been reached. Joint work with Erich Kaltofen and Zhiwei Hao.

欢迎大家参加！