数学与系统科学研究院

计算数学所学术报告

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<u>报告题目</u>：

Optimization with Uncertain, Online and Massive Data

<u>邀请人:</u>　　优化与应用研究中心

<u>报告时间</u>：**2015** 年 **4** 月 **4** 日（周六）

上午 **10:30-11:30**

<u>报告地点</u>：　　数学院科南楼二层

202 会议室

Abstract:

We present several analytic models and computational algorithms dealing with online/dynamic, structured and/or massively distributed data. Specifically, we discuss

- **Distributionally Robust Optimization Models, where many problems can be efficiently solved when the associated uncertain data possess no priori distributions;**
- **Near-Optimal Online Linear Programming Algorithms, where the matrix data is revealed column by column along with the objective function and a decision has to be made as soon as a variable arrives;**
- **Sparse regression with Non-convex Regularization, where we give sparse and structure characterizations for every KKT stationary solution of the problem;**
- **Alternating Direction Method of Multipliers (ADMM) for large-scale data, where we give an example to show that the direct extension of ADMM for three-block convex minimization problems is not necessarily convergent, and propose simple and effective convergent variants.**

欢迎大家参加！