

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Shoham Sabach**

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报告题目:

**Proximal minimization
algorithms for nonconvex and
nonsmooth problems**

邀请人: 刘歆 副研究员

报告时间: 2017 年 8 月 3 日 (周四)

上午 9:00-10:00

报告地点: 科技综合楼楼三层

311 报告厅

Abstract:

We introduce a self-contained convergence analysis framework for first order methods in the setting of nonconvex and nonsmooth optimization problems. Our approach builds on the powerful Kurdyka-Lojasiewicz property. It allows for analyzing, under mild assumptions, various classes of nonconvex and nonsmooth problems with semi-algebraic data, a property shared by many optimization models arising in various fundamental data science paradigms. We illustrate our results by deriving a new and simple proximal alternating linearized minimization algorithm (PALM). The versatility of PALM permits to exploit structures and data information relevant to important applications and paves the ways to the derivation of other interesting algorithmic variants. This is a joint work with Jerome Bolte and Marc Teboulle.

欢迎大家参加！