数学与系统科学研究院

计算数学所网络学术报告

报告人： 徐立伟 教授

（ 电子科技大学 ）

报告题目：

Stochastic Gauss-Newton Algorithms for Online PCA

邀请人： 崔涛 副研究员

刘歆 研究员

报告时间：2021 年 1 月 22 日（周五）

下午 **16:30-17:30**

报告工具：腾讯会议（**ID：268 717 481**）

Abstract：

In this talk, we introduce the symmetric low rank product model for dominant eigenspace calculation into the online principal component analysis (PCA) problem. Two Gauss-Newton algorithms with dimilishing stepsize and adaptive stepsize are proposed, respectively. We construct the global convergence of the diminishing version and show its robustness. Moreover, the adaptive version illustrates its extraordinary numerical performance. Finally, we propose a variance reduced version of the SGN which is of diminishing variance without full gradient calculation.

欢迎大家参加！