

数学与系统科学研究院

计算数学所学术报告

报告人: **Dr. Peiting Gao**

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报告题目:

**Some adaptive projection methods
for constrained monotone nonlinear
equations with compressive sensing**

邀请人: 刘歆 副研究员

报告时间: **2019 年 11 月 26 日 (周二)**

下午 15:30-16:30

报告地点: **科技综合楼三层**

311 报告厅

Abstract:

In this talk, we want to introduce some three-term conjugate gradient methods involving the selection of adaptive parameters. Some parameters in the search direction are determined by minimizing the distance between the relative matrix and self-scaling memoryless BFGS updated by Oren in the Frobenius norm. And the remain others are obtained by enforcing the boundness of the condition number of the relative matrix. By the projection technology, we extend these methods to solve the monotone nonlinear equations with convex constraints. Preliminary numerical results are reported to demonstrate a promising computational performance. Furthermore, we also employ our algorithms to compressive sensing. Some numerical comparisons are given to indicate that our algorithms are efficient.

欢迎大家参加！