数学与系统科学研究院

计算数学所系列学术报告

报告人：　Dr. Zaikun Zhang

（ IRIT-ENSEEIHT, France ）

报告题目及时间：

Direct Search Based on Probabilistic Descent I

2015 年 8 月 11 日（周二）下午 15:30~16:30

Direct Search Based on Probabilistic Descent II

2015 年 8 月 11 日（周二）下午 16:30~17:30

邀请人：　刘歆 副研究员

报告地点：　科技综合楼三层

311 报告厅

Abstract:

In this paper, we analyze direct-search algorithms when the polling directions are prob-abilistic descent, meaning that with a certain probability at least one of them is of descenttype. Such a framework enjoys almost-sure global convergence. More interestingly, we will show a global decaying rate of 1/sqrt{k} for the gradient size, with overwhelmingly high probability, matching the corresponding rate for the deterministic versions of the gradient method or of direct search. Our analysis helps to understand numerical behavior and the choice ofthe number of polling directions.

欢迎大家参加！