

数学与系统科学研究院

计算数学所学术报告

报告人: Prof. Cong SUN

(*School of Science, Beijing University of Posts and
Telecommunications*)

报告题目:

**Nonlinear optimization techniques in
wireless communications**

邀请人: 刘亚锋 副研究员

报告时间: 2020 年 12 月 1 日 (周二)

下午 16:30-17:30

报告地点: 科技综合楼

311 教室

Abstract:

In this talk, several commonly used nonlinear optimization techniques in wireless communications are reviewed. Optimization problems in wireless communications are usually nonconvex and highly nonlinear, where classic optimization methods may not be applied directly. Special structures of the optimization problems and the wireless communication background information should be considered and thus different optimization techniques are used accordingly. Starting from optimality conditions, we will talk about KKT equations, dual formulation, alternating direction search, and especially approximation techniques including Taylor expansion approximation, convex approximation and majorization/minorization. Examples will be presented to show the combinations of continuous and combinatorial techniques.

欢迎大家参加！