

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Jiawang Nie**

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报告题目:

Bilevel Polynomial Optimization

邀请人: 刘亚锋 博士

报告时间: **2017年7月7日 (周五)**

上午 10:00-11:00

报告地点: 科技综合楼三层

311 报告厅

Abstract:

A bilevel program is an optimization problem whose constraints involve another optimization problem. This talk discusses bilevel polynomial programs (BPPs), i.e., all the functions are polynomials. We reformulate BPPs equivalently as semi-infinite polynomial programs (SIPPs), using Fritz John conditions and Jacobian representations. Combining the exchange technique and Lasserre type semidefinite relaxations, we propose numerical methods for solving both simple and general BPPs. For simple BPPs, we prove the convergence to global optimal solutions. This is a joint work with Li Wang and Jane Ye.

欢迎大家参加！