

# 数学与系统科学研究院

## 计算数学所学术报告

报告人: 罗和治 教授

( 浙江工业大学 )

报告题目:

**New Global Algorithms for  
Quadratic Programming with A Few  
Negative Eigenvalues**

邀请人: 优化与应用研究中心

报告时间: 2015 年 7 月 4 日 (周六)

上午 9:20-10:00

报告地点: 数学院南楼二层

219 会议室

## **Abstract:**

**We consider quadratic programs with a few negative eigenvalues subject to linear constraints (LCQP). The LCQP model has been widely used a broad range of applications and is known to be NP-hard. In this paper, we introduce a new paradigm in the design of global algorithms for LCQP. The new paradigm integrates several simple effective optimization techniques such as alternate direction method, convex relaxation, initialization and partitioning to find a globally optimal solution to the underlying LCQP within a pre-specified  $\epsilon$ -tolerance. The global convergence of the algorithm will be established and its complexity will be estimated. Promising numerical results are reported.**

**欢迎大家参加！**