

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Jinyan Fan**

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报告题目:

**The subspace properties and exact
Jacobian SDP relaxation of the
Celis-Dennis-Tapia problem**

邀请人: **袁亚湘 院士**

报告时间: **2015 年 3 月 17 日 (周二)**

下午 16:30-17:30

报告地点: **科技综合楼三层**

311 报告厅

Abstract:

The Celis-Dennis-Tapia (CDT) problem concerns the minimization of a quadratic function over the intersection of two ellipsoids, which is a subproblem of some trust region algorithms for nonlinear programming. Motivated by Grapiglia, Yuan and Yuan' results on subspace properties of the CDT problem (JOSRC, 2013, 425--451), in this talk, we will propose a new subspace approach for the CDT problem, which could reduce its dimension significantly under some conditions. An exact Jacobian SDP relaxation method for the reduced CDT problem will also be presented to find its global minimizer.

欢迎大家参加！