

数学与系统科学研究院

计算数学所学术报告

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报告题目:

**The CP-matrix Approximation
Problem**

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报告时间: 2017 年 7 月 11 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:

A symmetric matrix A is completely positive (CP) if there exists an entrywise nonnegative matrix V such that $A = V V^T$. In this talk, we discuss the CP-matrix approximation problem: for a given symmetric matrix C , find a CP matrix X , such that X is close to C as much as possible, under some linear constraints. We formulate the problem as a linear optimization problem with the norm cone and the cone of moments, then construct a hierarchy of semidefinite relaxations for solving it.

欢迎大家参加！