

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:

**On the low-rank solution of the
Q-weighted nearest correlation
matrix problem**

邀请人: 白中治 研究员

报告时间: 2016 年 8 月 15 日 (周一)

晚上 20:00-21:00

报告地点: 数学院南楼七层

702 会议室

Abstract:

The low-rank solution of the Q-weighted nearest correlation matrix problem is studied. Based on the property of Q-weighted norm and the Gramian representation, we first reformulate the Q-weighted nearest correlation matrix problem as a minimization problem of the trace function with quadratic constraints, and then prove that the solution of the minimization problem of the trace function is the stationary point of the original problem if it is rank deficient. Finally, the nonmonotone spectral projected gradient method is constructed to solve them. Numerical examples illustrate that the new method is feasible and effective.

欢迎大家参加！