数学与系统科学研究院

计算数学所定期学术报告

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报告题目：

Structure Enforcing Matrix Factorization: Algorithm and Application

报告时间：**2011 年 10 月 13 日（周四）**

下午 16：00～17：00

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报告地点： **科技综合楼三层 311**

计算数学所报告厅

Abstract：

Principal component analysis is a widely used tool in data mining. With the development in both optimization and application, more and more structured PCA models are proposed, like sparse PCA, robust PCA, nonnegative matrix factorization, and so on. But in real application problems, there is more prior information that can be used, such as combinatorial patterns. In the structure enforcing matrix factorization framework, any general structures can be enforced in the original matrix factorization scheme. Then we propose a modified augmented Lagrange alternating direction method(ALADM) for solving this new model. Moreover, we illustrate that the new idea can improve the result of PCA through some real application problems in which the structure allows easy projection.

欢迎大家参加！