

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:

**Nonlinear PCA Algorithms with two
fixed endpoints and its applications**

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计算数学所报告厅

Abstract:

For the symmetric variables, PCA is better than linear regression. However, PCA can not deal with nonlinear regression with symmetric variables. Prof.Hastie in Stanford University proposed principal curves idea and algorithms, which can be used in many areas. But it is computational complex and can not solve the problems with two fixed endpoints which is common used in generating digital GPS maps for highways and railways. We propose the concept, models and some heuristic algorithms for this kind of problems and hope to get better solution in the future.

欢迎大家参加!