数学与系统科学研究院

计算数学所学术报告

报告人：**Assisstant prof. Akil Narayan**

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报告题目：

Unstructured interpolation strategies for parametrized functions: Least Orthogonal Interpolant Leja sequences

邀请人：　　周涛 博士

报告时间：**2013** 年 **7** 月 **24** 日（周三）

下午 **14:30-15:30**

报告地点：　　科技综合楼三层 **311**

计算数学所报告厅

Abstract:

The approximation of parametrized functions has become a central problem in large-scale scientific computing. When direct many-query computations become infeasible, a model order reduction strategy is often employed that constructs an inexpensive surrogate. Our focus is on non-intrusive surrogate construction methods that use parametric snapshots as the basis for interpolatory approximation. We discuss a non-adapted sequential construction of parametric nodes (Leja sequences) on which multivariate interpolation is well-defined (Least Orthogonal Interpolation). We illustrate the effectiveness of the approach with several examples, including comparisons against the popular sparse grid approach. We will briefly discuss extensions to adaptive approximation and hybrid Leja-sparse grid methods.

欢迎大家参加！