

数学与系统科学研究院

计算数学所学术报告

报告人: Prof. Weinan E

(Princeton University, USA)

报告题目:

**Eigen-subspace problems and the
electronic structure analysis**

邀请人: 陈志明研究员

报告时间: 2008年9月16日(周二)

下午 4:00—5:00

报告地点: 科技综合楼三层 311

计算数学所报告厅

Abstract:

Given a large matrix, how do we best compress it to a smaller matrix?

The answer to this question is given by singular value decomposition (SVD).

However, traditional algorithms in SVD is cubic scaling. For many important practical problems, linear scaling algorithms can be constructed. I will discuss these issues.

The second half of the talk will be devoted to applications to electronic structure analysis using Kohn–Sham density functional theory.

欢迎大家参加！