

数学与系统科学研究院

计算数学所学术报告

报告人: Dr. Xiaoliang Wan

(Princeton University)

报告题目:

Polynomial chaos and stochastic  
elliptic models

邀请人: 陈志明研究员

报告时间: 2009年7月27日(周一)

下午 3:00—4:00

报告地点: 科技综合楼三层 311

计算数学所报告厅

Abstract:

The inherent random nature of many physical

**and biological problems has long been recognized in science and engineering. However, most of the mathematical models used in applications are deterministic, where the influence of uncertainty, such as imprecise material properties and noise in boundary/initial conditions, is typically ignored. Due to the development in numerical algorithms, theory of stochastic PDEs and computational capability, there has been recently an intense interest in modeling uncertainty in large-scale simulations.**

**In this talk, I will present the development of a non-sampling numerical Strategy, called polynomial chaos method. In particular, I will discuss stochastic finite element methods based on polynomial chaos for stochastic elliptic models.**

**欢迎大家参加！**