数学与系统科学研究院

计算数学所学术报告

报告人：**Prof. George Em Karniadakis**

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报告题目：

Numerical Methods for Stochastic Modeling and Uncertainty Quantification

邀请人： 周涛 博士

报告时间：2013 年 11 月 19 日（周二）

上午 **10:00-11:00**

报告地点： 科技综合楼三层 **311**

计算数学所报告厅

Abstract：

Polynomial chaos and its fast alternative stochastic collocation have been very popular in solving stochastic partial differential equations (SPDES), but with a small number of dimensions. In this talk, after a short review of such methods new approaches will be presented, including a Wick-Malliavin expansion and a new theory based on evolution equations of the joint response-excitation PDF. Both approaches allow fast numerical solutions in high dimensions of SPDEs and offer effective potentials to polynomial chaos methods.

欢迎大家参加！