数学与系统科学研究院

计算数学所学术报告

报告人：Prof. Zhongqiang Zhang

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报告题目：

Spectral methods for noise and second-order stochastic differential equations

邀请人： 唐贻发 研究员

报告时间：2018 年 8 月 5 日（周日）

上午 10:30-11:30

报告地点： 数学院南楼七层

702 教室

Abstract:

We consider finite element methods for a class of semilinear elliptic equations with additive spatial noise. We represent the noise with a spectral expansion and use its truncation to have optimal convergence of the finite element methods. Taking a proper truncation of the spectral approximation, we prove the optimal strong convergence order of the finite element approximation. We also discuss the weak convergence of the considered numerical methods. Numerical results confirm our prediction for one- and two-dimensional elliptic problems.

欢迎大家参加！