## 数学与系统科学研究院 计算数学所网络学术报告

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## 报告题目:

A priori error estimates of Meshless method for optimal control problems of stochastic elliptic PDEs

邀请人: 龚伟 副研究员

报告时间: 2020 年 12 月 18 日(周五) 上午 10:30-11:30

报告工具: 腾讯会议(ID: 649 232 567) 会议链接:

https://meeting.tencent.com/s/o7XGCO6LT8Dm

## **Abstract:**

In this work, we study the optimal control problems of stochastic elliptic equations with random field in its coefficients. The main contributions of this work are two aspects. Firstly, a meshless method coupled with the stochastic Galerkin method is investigated to approximate the control problems, which is competitive high-dimensional random inputs. Secondly, a priori error estimates are derived for the solutions to the control problems. Some numerical tests are carried out to confirm the theoretical results and to demonstrate the efficiency of the proposed method.

## 欢迎大家参加!