

数学与系统科学研究院

计算数学所学术报告

报告人: **Prof. Shuhua Zhang**

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报告题目:

**Modeling and Computation of
Transboundary Pollution by
Differential Games**

邀请人: 林群 院士

报告时间: 2014 年 12 月 14 日(周日)

下午 16:00-17:30

报告地点: 数学院南楼七层 702

会议室

Abstract:

In this talk, we consider how permits allowance trading, population growth, and technology change affect emission, and try to establish a differential game model to describe the problem quantitatively, which leads to a system of Hamilton-Jacobi-Bellman (HJB) nonlinear partial differential equations. In addition, a fitted finite volume method is proposed to the resulting HJB, and some numerical examples are presented to demonstrate its efficiency and convergence rates. Moreover, the sensitivity analysis of some parameters is also provided.

欢迎大家参加！