

数学与系统科学研究院

计算数学所博士后定期学术报告

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报告题目:

**Stochastic variational inequalities  
and applications**

报告时间: **2013 年 10 月 9 日 (周三)**

**下午 16:00~17:00**

报告地点: **科技综合楼三层 311**

**计算数学所报告厅**

## **Abstract:**

We focus on the stochastic variational inequality (VI). The stochastic VI has been used widely in engineering and economics as an effective mathematical model for a number of equilibrium problems involving uncertain data. For a class of stochastic VIs, we present a new residual function defined by the gap function and employ the expected residual minimization (ERM) formulation to solve the stochastic VI. We study the sample average approximation (SAA) problems of the ERM formulation and give efficient methods to solve it. We provide applications arising from traffic flow problems for stochastic VI. We show the conditions and assumptions imposed in this thesis hold in such applications. Moreover, numerical results illustrate that the solutions, efficiently generated by the ERM formulation, have desirable properties.

欢迎大家参加!