

数学与系统科学研究院

计算数学所学术报告

报告人: **Dr. Cristina Anton**

(*Grant MacEwan University*)

报告题目:

**Explicit Pseudo-Symplectic Methods
based on generating functions for
Stochastic Hamiltonian Systems**

邀请人: 洪佳林 研究员

报告时间: 2019 年 9 月 18 日 (周三)

下午 16:00-17:00

报告地点: 数学院南楼二层

226 教室

Abstract:

We propose a systematic approach to construct explicit pseudo-symplectic schemes for stochastic Hamiltonian systems. This method is based on generating functions, so it is an extension of the techniques used for constructing high-order symplectic schemes for stochastic Hamiltonian systems. We study the order of convergence of the proposed explicit pseudo-symplectic schemes. The excellent long term performance of the pseudo-symplectic schemes is verified numerically.

欢迎大家参加！