SPECIAL COLLOQUIUM

Department of Mathematics and Department of Statistics and Probability

Michigan State University

Xiaoying Han Auburn University

Dynamics of Infinite Dimensional Stochastic Differential Equations

Thursday, January 31, 2013 C405 Wells Hall 10:20 a.m. - 11:10 a.m. Refreshments: 10:00 a.m.

Abstract

My talk will include two parts. In the first part I will first provide the framework of random dynamical systems. Then I will talk about studying qualitatively the asymptotic behavior (more specifically, existence of random attractors) of stochastic lattice differential equations by using a random dynamical system approach. In the second part, I will talk about some quantitative methods for stochastic PDEs including a brief introduction on particle filter and an inverse filtering approach.

To request an interpreter or other accomodations for people with disabilities, please call the Department of Statistics and Probability at 517-355-9589.