Xiaoying Han*, xzh0003@auburn.edu. *Random Attractors for Stochastic Lattice Differential Equations in Weighted Spaces.*

In this talk we present the asymptotic behavior of solutions to the first and second order stochastic lattice differential equation with multiplicative/additive white noise in weighted space. We first provide some sufficient conditions for the existence and uniqueness of solutions, and then establish the existence of tempered random bounded absorbing sets and global random attractors. (Received January 16, 2012)