April 19, 2013 KAP 414 3:30 PM – 4:30 PM

Prof. Qi Zhang

(Fudan University)
joint with Prob/Stat seminar

"Stationary Solutions and Random Periodic Solutions of Stochastic Equations"

Abstract: The stationary solutions and the random periodic solutions are the extensions of the fixed points and the period solutions in deterministic systems to random cases, respectively. In this talk, i will introduce our work to find the stationary solutions of parabolic SPDEs with polynomial growth generators by the backward doubly stochastic differential equations. The compactness theorem in a stochastic version is used to get the solvability of SPDEs. Also i will introduce the construction to the random periodic solutions of stochastic differential equations with non-additive noises.