## 1107-60-162 Michael Salins\* (msalins@math.umd.edu), Mathematics Building, University of Maryland, College Park, MD 20742. Freidlin-Wentzell exit problems for stochastic equations in Banach spaces.

For a finite dimensional diffusion exposed to a small noise, Freidlin and Wentzell studied the asymptotics of the exit time and exit place from a basin of attraction. Since their work, several authors have studied similar exit problems associated to specific stochastic partial differential equations. Unfortunately, the methods for studying the exit problems for infinite dimensional systems tended to be very equation-specific. In this talk, I present a general method, based on a control theoretic approach, to characterize the exit time and exit place from a basin of a attraction for a large class of stochastic equations in Banach spaces. (Received January 15, 2015)