

## Discrete Mathematics Seminar

Time: Friday, 22 November 2013, 1:00-2:00 PM  
Room: 238 Derrick Hall  
Title: Introduction to Random Walks in Random and Non-random Environments  
Speaker: Dr. Youngsoo Seol, Mathematics Department

### Abstract:

This talk is an introductory talk about random walks on  $Z$  and random walks in random environments on  $Z$ . In this talk, we will study the basic asymptotic behaviors such as recurrence/transience criteria, speed of random walks and limiting distribution for random walks on  $Z$  and random walks in random environments (briefly say, RWRE) on  $Z$ . There are two types of limit theorems for RWRE as both recurrent and transient regimes. However, we will focus on limit theorems for RWRE on  $Z$  under recurrent regime as the Sinai's results.