## 1063-60-195 Firas Rassoul-Agha\* (firas@math.utah.edu), 155 South 1400 East, Salt Lake City, UT 84109, and Timo Seppalainen. Almost sure process-level large deviations for random walk in random environment.

Random walk in random environment is a generalization of classical random walk. It accounts for the disordered medium in which the particle travels and with which it interacts. The usual limit theorems become more subtle and much harder to prove. We prove a level-3 large deviation principle, for almost every realization of the environment, with rate function related to an entropy. This is joint work with Timo Seppalainen. (Received August 16, 2010)