

Random walks in random environments on trees

Yueyun Hu

Université Paris 13

Consider a class of random walks in random environments on a (regular or Galton–Watson) tree. Lyons and Pemantle (1992) gave a precise recurrence/transience criterion. We are interested in the recurrent case and prove a subdiffusive behavior and a phenomenon of slow movement. It turns out that the almost sure behaviors of the walk are closely related to some fine properties of a branching random walk.