

Convergence in law for the minimum of a branching random walk

Elie Aidekon, Paris

Abstract: We consider a branching random walk on the real line. At each integer time, particles make independent steps then split. We are interested in the position of the leftmost particle of this population. We show that this minimum, once recentered around its mean, converges in law. Our proof gives a description of the trajectory of the whole path of the leftmost particle as well. This is the analog of the well-known result of Bramson in the setting of the branching Brownian motion.