

Recurrence vs transience in RWCRE

Yuki Chino(千野由喜)
Department of Applied Mathematics
National Yang Ming Chiao Tung University

Abstract

One-dimensional Random Walk in Cooling Random Environment (RWCRE) is obtained as a patchwork of one-dimensional Random Walk in Random Environment (RWRE) by resampling the environment along a sequence of deterministic times. The RWCRE model can be seen as a model that interpolates between the classical static model and the model with i.i.d. resamplings every unit of time. This model shows a crossover between RWRE and a homogeneous model according to how to resample, called the cooling map. This talk is based on a joint work with L. Avena (Leiden University), C. da Costa (Durham University) and F. den Hollander (Leiden University).