TOPIC: Two-Dimensional Brownian Random Interlacement

SPEAKER: Francis Comets, Université Paris Diderot

TIME: 11:00am-12:00pm, Tuesday, March 20, 2018

VENUE: Room 264, Geography Building, Zhongbei Campus
(华东师范大学中山北路校区，地理楼264室)

ABSTRACT OF THE TALK

The cover time is the time needed for the Wiener sausage of radius 1 to cover the torus of linear size n. In dimension $d \geq 3$, A. Sznitman introduced random interlacements to describe the local covering picture at a fixed intensity; They still give a good account at large densities, bridging up to cover time. In dimension 2, with S. Popov and M. Vachkovskaia, we construct random interlacements to describe the neighborhood of an unvisited site at times proportional to the cover time. In this talk, I will explain the Brownian case. (Joint work with Serguei Popov.)

BIOGRAPHY

Francis Comets is currently Professor at Université Paris Diderot. His main research themes are stochastic processes, statistical mechanics, disordered systems, and interacting systems. Some of his recent works are on directed polymer models in random environment (with a particular emphasis on the localization phenomenon), and random interlacements (in relation with cover processes). Other interests are random walks in random environments, self-interacting random walk, growth models, Lyapunov exponents, and large deviations.