

## Inn'formal Probability Seminar

**Nicolas Bouchot (Université Paris-Dauphine)** 

"Confined random walk and tilted interlacements"

## **Abstract:**

Consider a large domain of Z<sup>d</sup>, in which a simple random walk is trapped "forever". This confined walk can be modelled by a random walk on conductances given by the first eigenvector of the discrete Laplacian on the domain. I will present a coupling between the range of this walk after a long time and so-called "tilted interlacements". Random interlacements are formally a Poisson soup of independent random walk trajectories, whose density is controlled by some positive parameter. This coupling uses the soft local times method, which I will also present.

Tuesday | 06.05.2025 | 15:30 HS 10, Architecture Building