

Date: 2020.10.29. 9:00-10:00 (Beijing time).

Tencent meeting: 298 845 359

Zoom: 639 989 65372 (psw 123456)

Speaker: Yuan Zhang (Peking University)

Title: On Geometries of Finitary Random Interlacements

Abstract: In this talk, we will discuss geometric properties of Finitary Random Interlacements $\mathcal{FI}^{u,T}$ in \mathbf{Z}^d . We prove that with probability one $\mathcal{FI}^{u,T}$ has no infinite connected component for all sufficiently small fiber length $T > 0$, and a unique infinite connected component for all sufficiently large T , and chemical distance on the infinite cluster is of the same order as Euclidean distance. We also present the local uniqueness property and an asymptotic shape theorem. Researches joint with E.B. Procaccia, J. Ye. Y. Xiong, Z. Cai, and X. Han.