universität innsbruck

Department of Mathematics

Inn'formal Probability Seminar

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“Upper tail large deviations for chemical distance in supercritical percolation”

Abstract

We consider supercritical bond percolation on Z^d and study the chemical distance, i.e., the graph distance on the infinite cluster. It is well-known that there exists a deterministic constant μ(x) such that the chemical distance D(0,nx) between two connected points 0 and nx grows like nμ(x). We prove the existence of the rate function for the upper tail large deviation event {D(0,nx)>nμ(x)(1+ϵ),0<->nx} for d>=3.
Joint work with Shuta Nakajima.

Tuesday | 10.10.2023 | 14:15

SR 609 | civil engineer building