



The Abdus Salam
**International Centre
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Random walk at weak and strong disorder

Abstract:

We consider random walks at low disorder on \mathbb{Z}^d . For dimensions $d \geq 4$, we exhibit a phase transition on the strength of the disorder expressed as an equality between the quenched and annealed rate functions.

As a corollary we obtain explicit formulas for the quenched rate function in the boundary of the set where it is finite.

This talk is based on a joint work with Bazaes, Mukherjee and Saglietti.