

A. Gloria - ZOOM - The landscape function in \mathbb{R}^d

jeudi 27 octobre 2022 09:00 (1 heure)

In this talk I will describe the landscape function, a quantity introduced by Filoche and Mayboroda ten years ago in order to study localization phenomena for random Schrödinger operators. In the first part I will quickly discuss the striking fact that the landscape function accurately predicts the support of localized eigenstates and their energy in bounded domains. In the main part of the talk I will show how to define the landscape function in the whole space, and characterise its correlations. The main ingredient is the exponential decay of the Green function of the random Schrödinger operator, which I shall establish.

This is a joint work with Guy David and Svitlana Mayboroda.