

國立政治大學應用數學系演講

Department of Mathematical Sciences, National Chengchi University

Speaker: 黃建豪博士 (國立政治大學應用數學系)

Title: Some progress on Wiener sausages in random environments

Time: 16:10 - 17:00, Monday, December 21, 2020

Venue: Room 070221, 2F, Zhi Xi Building(志希樓 2 樓 e 化教室)

Refreshment: Refreshments will be served in the Faculty Lounge 30 minutes before the talk.

Abstract

The two-dimensional parabolic Anderson model is the statistical mechanics model with Hamiltonian described by the two-dimensional random walk in random scenery on lattice. The particles gain energy whenever they visit the potential sites. The analogous continuum model, namely, the model with noise formally defined on \mathbb{R}^2 , is not well-defined. Instead, we consider that the particles only gain energy at their first visit. In the continuum and weak disorder regime, the partition function of our model as a random variable converges weakly to a Wiener Chaos expansion.