

Seminario de Probabilidades de Chile

Speaker: Johannes Baeumler (UCLA)

Title: A (dis)continuous percolation phase transition on the hierarchical lattice.

Abstract: For long-range percolation on $\mathbb{Z}$ with translation-invariant edge kernel J , it is a classical theorem of Aizenman and Newman (1986) that the phase transition is discontinuous when $J(x-y)$ is of order $|x-y|^{-2}$ and that there is no phase transition at all when $J(x-y) = o(|x-y|^{-2})$. We prove analogous theorems for the hierarchical lattice, where the relevant threshold is at $|x-y|^{-2d} \log \log |x-y|$ rather than $|x-y|^{-2}$: There is a continuous phase transition for kernels of larger order, a discontinuous phase transition for kernels of exactly this order, and no phase transition at all for kernels of smaller order. Based on joint work with Tom Hutchcroft.

El enlace para conectarse al seminario es:

Unirse a la reunión Zoom

<https://reuna.zoom.us/j/84521834914?pwd=OTZ6Y0NWM3pYTGtTbEt3c0luTG96UT09>

ID de reunión: 845 2183 4914

Código de acceso: 997973

Modalidad híbrida en la sala Maryam Mirzakhani, Torre Norte Piso 6, , Beauchef 851.
Miércoles 26 de Marzo 2025 a las 16:15 horas.

