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Seminario de Probabilidades de Chile

Orador: Carlo Scali (Technische Universität München)

Título: Quenched limits for sub-ballistic random walks in random conductances: high and low dimensions.

Resumen: Consider a random walk amongst elliptic conductances with a deterministic directional bias. For all dimensions larger or equal than 2, Fribergh proved that the walk is ballistic if and only if the mean of a conductance is finite. In the infinite mean case, under proper regularity conditions, Fribergh and Kious showed the convergence of the rescaled process towards Fractional Kinetics, in the annealed setting. I will explain how to obtain a quenched limit by exploiting a celebrated idea of Bolthausen and Sznitman. I will highlight the difference between the high dimensional case (d \ge 5) and the low dimensional one (d = 2,3,4), and how one could apply our strategy to a wide class of models of biased random walks. This is based on joint works with A. Fribergh, T. Lions and U. De Ambroggio.

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 12 de Noviembre 2025 a las 16:15 horas.