

Seminario Núcleo MESCD / Conjunto Modelamiento Estocástico

Expositor

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Título

Scaling limits for a slowed random walk driven by symmetric exclusion

Abstract:

Consider a simple symmetric exclusion process in one dimension, and a random walk on the same space. When on top of particles, the walker has a drift to the left, when on top of holes it has a drift to the right. Under weakly asymmetric scaling, we prove a law of large numbers and a functional central limit theorem for the position of this random walk. The proof uses techniques from the field of hydrodynamic limits to study the fluctuations of the number of particles of the in large boxes around the walker.

Martes 07 de Agosto a las 16:15 hrs. Sala de Seminarios Felipe Álvarez Daziano, ubicada en Beauchef 851, Torre Norte, Quinto Piso, Departamento de Ingeniería Matemática.