



Institut für Mathematik

Seminar zur Stochastik

Donnerstag, 8. Juni 2023
15 Uhr s.t.
SR 025 August-Bebel-Str. 4

Frau Prof. Olga Aryasova

(National Academy of Sciences of Ukraine, Kyiv; derzeit Jena)

“On homogenization of a multidimensional diffusion with semipermeable reflecting interfaces”

Abstract: The talk deals with the homogenization problem for a system of stochastic differential equation with local time terms that models a multivariate diffusion in presence of semipermeable hyperplane interfaces with oblique penetration. We show that this system has a unique weak solution and determine its weak limit as the distances between the interfaces converge to zero. In the limit, the singular local times terms vanish and give rise to an additional regular interface-induced drift.

Alle Interessierte sind herzlich eingeladen