FRIEDRICH-SCHILLER-
UNIVERSITÄT
JENA
Fakultät für Mathematik und Informatik

Institut für Mathematik

Seminar zur Stochastik

Donnerstag, 24. Oktober 2019
12 Uhr c. t.
HS 3 Abbeanum

Herr Dr. Nikola Sandrić
(University of Zagreb, Croatia; derzeit FSU)

"Periodic homogenization of a Lévy-type process with small jumps"

Abstract: In this talk, we will discuss the problem of periodic homogenization of a Feller process generated by a pseudo-differential operator, the so-called Lévy-type process. Under the assumptions that the generator has rapidly periodically oscillating coefficients, and that it admits" small jumps" only (that is, the jump kernel has finite second moment), we show that the appropriately centered and scaled process convergence weakly to a Brownian motion with covariance matrix given in terms of the coefficients of the generator. The presented results generalize the classical and well-known results related to periodic homogenization of a diffusion process.

Alle Interessierte sind herzlich eingeladen

Kontakt:
Ilya Pavlyukevich
Professur Stochastik mit Anwendungen in den Naturwissenschaften
Institut für Mathematik
Ernst-Abbe-Platz 2
07743 Jena