



Institut für Mathematik

Seminar zur Stochastik

Donnerstag, 17. November 2022
16:00 Uhr
SR 124 Carl-Zeiss-Str. 3

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

“Subexponential upper and lower bounds in Wasserstein distance for Markov processes”

Abstract: In this talk, relying on Foster-Lyapunov drift conditions, we will discuss subexponential upper and lower bounds on the rate of convergence in the L_p -Wasserstein distance for a class of irreducible and aperiodic Markov processes. We will further discuss these results in the context of Markov Levy-type processes. In the lack of irreducibility and/or aperiodicity properties, we will comment on exponential ergodicity in the L_p -Wasserstein distance for a class of Ito processes under an asymptotic flatness (uniform dissipativity) assumption. Lastly, applications of these results to specific processes will be presented, including Langevin tempered diffusion processes, piecewise Ornstein-Uhlenbeck processes with jumps under constant and stationary Markov controls, and backward recurrence time chains, for which we will provide a sharp characterization of the rate of convergence via matching upper and lower bounds.

Alle Interessierte sind herzlich eingeladen!

Kontakt:
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