



Institut für Mathematik

Seminar zur Stochastik

Montag, 17. Oktober 2022
12:15 Uhr
SR 102 August-Bebel-Str. 4

Frau Prof. Dr. Katarzyna Pietruska-Pałuba
(University of Warsaw)

“ L_p -inequalities and identities related to Levy processes”

Abstract: I will present recent results, concerned with generators and forms (acting on L_p) related to certain Levy processes. We start with the optimal Hardy inequality for stable processes – which requires the L_p -counterpart of the usual Dirichlet form of the process. This object arises naturally while considering solutions to Dirichlet problems for sufficiently regular domains (and processes more general than stable). In this vein, we prove variants of the Douglas identity, both in L_2 and L_p , then show their relation to extension and trace theorems.

Alle Interessierte sind herzlich eingeladen

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