Fakultät Mathematik
Institut für Analysis

Dresden, 23. November 2026

Im

Oberseminar Analysis

hält

Dr. Markus Kunze

Universität Konstanz, FB Mathematik und Statistik

einen Vortrag zum Thema

A monotone convergence theorem for strong Feller semigroups

Abstract:

Let T_n be an increasing sequence of sub Markovian kernel operators over a Polish space E that satisfy the strong Feller property, i.e. they map bounded and measurable functions on E to bounded and continuous functions on E. Denote the limit semigroup by T. We prove that T also satisfies the strong Feller property whenever the Laplace transform of T maps the function $\mathbb{1}$ to a continuous function. We apply this result to strongly elliptic operators on $\mathbb{R}^d$ with unbounded coefficients under fairly mild regularity assumptions. Some counterexamples will be discussed as well.

This talk is based on joint work with Christian Budde, Alexander Dobrick and Jochen Glück.

Datum: **Donnerstag, 7. Januar 2027**
Zeit: **16:40 Uhr**
Raum: **WIL C 103**

Kontakt: PD Dr. Anke Kalauch

Alle Interessent:innen sind herzlich eingeladen.

Stand: 23.11.2026