

Im

## Oberseminar Analysis

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**Dr. Karsten Kruse**

**TU Hamburg, Institut für Mathematik**

einen Vortrag zum Thema

### **On equicontinuity and tightness of bi-continuous semigroups**

Abstract:

In many applications of semigroups of operators on Banach spaces the semigroups are not strongly continuous with respect to the norm of the Banach space but strongly continuous with respect to a weaker Hausdorff locally convex topology. Examples of such semigroups are adjoint semigroups of norm-strongly continuous semigroups, implemented semigroups, and transition and Koopman semigroups on the space of bounded continuous functions on a Polish space.

These examples belong to the general framework of bi-continuous semigroups. In the context of perturbation theory of bi-continuous semigroups the notion of tightness emerged, which plays a similar role as equicontinuity in perturbation theory of strongly continuous semigroups on locally convex spaces. We study the relation between tightness and equicontinuity with respect to the mixed topology and present sufficient conditions that guarantee their equivalence.

This is a joint work with Felix L. Schwenninger.

Datum: **Donnerstag, 4. November 2021**

Zeit: **15:15 Uhr**

Der Vortrag findet über das Videokonferenzsystem „Zoom“ statt.

Ansprechpartner: Prof. Dr. Ralph Chill

Der virtuelle Raum ist über folgenden Link erreichbar:

<https://tu-dresden.zoom.us/j/89887698744?pwd=TVR3djhXNkV2U1ZFMTJ3czBOd3c4dz09>

Meeting ID: 898 8769 8744 , Passcode: @8%qq2

Alle Interessenten sind herzlich eingeladen.