

# Frankfurter Seminar

## Kolloquium des Instituts für Mathematik

### Sommersemester 2024

**Frankfurter Seminar, 05. Juni 2024**

**Sabine Jansen** (Universität München)

*Lie groups, orthogonal polynomials, and intertwining of Markov processes*

Duality and intertwining are powerful tools for Markov processes.

Lie groups and orthogonal polynomials belong to analysis and geometry. What does one have to do with the other? I will discuss representations of the  $\mathfrak{su}(1,1)$  current algebra, with connections to: infinite-dimensional Meixner and Laguerre polynomials; negative binomial (Pascal) point processes and Gamma random measures; measure-valued branching processes and spatial birth-death processes.

Based on joint work with Simone Floreani, Frank Redig and Stefan Wagner.

**Tee ab 16:15 Uhr**

Robert-Mayer-Straße 10 | Raum 711

**Ginkgo-Seminar 15:15 - 16:00 Uhr**

**Marco Seiler** A short introduction to Markov process duality

**Teilnahme nur für Studierende, Promovierende und Postdocs**

**Tee 16:15 - 16:45 Uhr**

