



## Institut für Mathematik

# Seminar zur Stochastik

Dienstag, 12. Dezember 2017

12 Uhr c. t.

**SR 147 UHG**, Fürstengraben 1

**Herr Dr. David Prömel**

(University of Oxford, United Kingdom)

## “On Skorokhod Embeddings and Poisson Equations”

**Abstract:** We discuss the Skorokhod embedding problem for a Levy process and a target probability measure, that is, the problem of finding a stopping time such that stopped Levy process is distributed as the target probability measure. Assuming the probability measure possesses a positive density, we propose necessary and sufficient conditions for the existence of a solution to the Skorokhod embedding problem in terms of the Poisson equation associated to the adjoint operator of the Levy process. Furthermore, we give a fairly explicit construction of the stopping time. The talk is based on a joint work with Leif Döring, Lukas Gonon and Oleg Reichmann.

**Alle Interessenten sind herzlich eingeladen**

**Kontakt:**

Stefan Ankirchner  
Professur Stochastische Analysis  
Institut für Mathematik  
Ernst-Abbe-Platz 2  
07743 Jena