UNIVERSITÄT DES SAARLANDES
Fakultät für Mathematik und Informatik
Fachrichtung Mathematik

Mathematisches Kolloquium

Am Freitag, dem 09. November 2018 spricht um 14 Uhr c. t. im Hörsaal IV der Fachrichtung Mathematik (Gebäude E2 4)

Prof. Dr. Sebastian Ferrando
Ryerson University, Toronto

über das Thema:

Trajectorial martingales. Convergence and Integration

Abstract: Starting with the motivation of the uncertainty present in financial mathematics models, we introduce trajectory spaces providing a non-stochastic analogue of a discrete time martingale process. We use the notion of super-replication to define null and full functions and the associated notion of a property holding almost everywhere (a.e.). The latter providing what can be seen as the worst case analogue of sets of measure zero in a stochastic setting. The a.e. notion is used to prove the pointwise convergence, on a full set of the original trajectory space, of the limit of a trajectorial transform sequence. The setting also allows to construct a natural integration operator which we study with some detail. The latter concept leads to conditional trajectorial integrals and a general notion of trajectorial martingale.

Der Gast wird von Prof. Dr. Christian Bender betreut.

Alle Interessenten sind zum Vortrag herzlich eingeladen.

Kaffee und Tee ab 13.45 Uhr im Konferenzraum der Mathematik   (Erdgeschoss, Raum 103)

Die Dozenten der Mathematik