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MATHEMATIKKOLLOQUIUM

Das Institut für Mathematik lädt zu folgendem Vortrag ein:

Markus Riedle

King's College London

Stochastic models in infinite dimensions

Starting from the Heath-Jarrow-Morton framework and the heat equation we motivate examples of noise for models in an infinite dimensional setting such as Wiener processes, Lévy processes and fractional Brownian motions. In more detail we consider the recently introduced cylindrical Lévy process as a generalisation of cylindrical Wiener processes, which are the most often applied models of noise in infinite dimensions. The perturbation of dynamics by noise results in stochastic differential equations and requires a theory of stochastic integration in the underlying space which is in this setting infinite dimensional. We explain the difficulties of stochastic integration in infinite dimensional spaces and indicate a possible approach. (part of this talk is based on joint works with D. Applebaum, O. van Gaans, E. Issoglio)

Zeit: **Dienstag, den 04. Dezember 2012 um 17.15 Uhr**

Ort: **Bauing.-Gebäude, Technikerstraße 13, HSB 7**

Gäste sind herzlich willkommen!

Christel & Stefan Geiß