INSTITUT FÜR MATHEMATIK

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MATHEMATIKKOLLOQUIUM

Das Institut für Mathematik lädt zu folgendem Vortrag ein:

Sonja Cox
ETH Zurich

Regularity for SDEs with non-globally Lipschitz coefficients

In recent work with Arnulf Jentzen and Martin Hutzenthaler we consider regularity of the solution to a stochastic differential equation (SDE) with respect to the initial value. In my talk I will explain why this type of regularity is relevant for proving convergence rates of numerical schemes to SDEs and for proving so-called `strong completeness' of the SDE.

A general theory for regularity with respect to the initial value is available for SDEs which satisfy the so-called `monotonicity condition', but little is known if this condition fails to hold. In my talk I will explain the approach we developed to deal with equations that do not satisfy the monotonicity condition, and provide examples of SDEs to which our approach can be applied.

Zeit: **Mittwoch, den 19. Februar 2014 um 16.15 Uhr**

Ort: **Victor-Franz-Hess Haus, Technikerstraße 25, HS F**

Gäste sind herzlich willkommen!

Christel & Stefan Geiss