ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO THE DOCTORAL SEMINAR

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Universität Klagenfurt

"Numerical Methods for Stochastic Differential Equations with Irregular Coefficients"

https://classroom.aau.at/m/math.stat

Wednesday, 26 May 2021

10:00 a.m.

Abstract

In this talk we will introduce stochastic differential equations with irregular coefficients. We will discuss about the convergence rate of the tamed Euler-Maruyama scheme for stochastic differential equations with discontinuous and polynomially growing drifts. Our approach relies on a transformation-based approach with the advantage to overcome the discontinuities in the drift, so that the transformed equation will have Lipschitz continuous coefficients. In the end, we will give a short outlook on a second ongoing research topic in the field of computational stochastics.

Michaela Hitz and the Department of Statistics look forward to seeing you at the talk!