ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO THE DOCTORAL SEMINAR

Backward Stochastic Differential Equations beyond Lipschitz Data

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Chaired by Michaela Hitz | Department of Statistics

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N.0.07

ABSTRACT

The talk starts with a basic introduction to backward stochastic differential equations (BSDEs), then presents various applications of these equations in PDE theory, control theory, stochastics on manifolds and mathematical finance. Directly following will be an overview of the BSDEs' mathematical treatment with special focus on the very relevant case where the equations' data is irregular: data that satisfy a Lipschitz assumption lead to a well-behaved theory and many results are available. In many applications however, instead of Lipschitz conditions, only a quadratic growth or a mere local Lipschitz condition is available, rising questions that lack a big unifying theory so far

We hope to see you there!