



Institut für Mathematik

Seminar zur Stochastik

Montag, 22. Juni 2026

12:00 Uhr

HS E005 (MINIMUM), Inselplatz 5

Georgi Dimitroff

(INFRONT Financial Technology GmbH, Frankfurt/Main)

“Credit and Bond Valuation for Illiquid Entities Using Market-Wide Neural Networks”

Abstract: Credit and bond valuation for illiquid entities is a long-standing problem with no definitive solution. Despite the vast amount of bond data available, standard curve calibration techniques limit evaluators to market data from the specific issuer. This poses a significant challenge when little to no data is available for a particular name. In reality, however, issuers do not exist in a vacuum; they are strongly correlated with similar entities and larger markets that possess ample trading data.

We present an approach that utilizes these correlations by training a single neural network on the entire bond market. In turn, the trained model generates consistent interest rate curves for arbitrary issuers based on their features, even when combined with highly sparse bond data. While providing bond curves for illiquid issuers, the model remains consistent with standard approaches for liquid ones, producing highly similar term structure curves to those obtained traditionally.

Alle Interessierte sind herzlich eingeladen!

Kontakt:

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