COLLOQUIUM

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Term Structure Models Driven by Wiener Processes and Poisson Measures: Existence and Positivity

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A405 Wells Hall
10:20 a.m. - 11:10 a.m.
Refreshments: 10:00 a.m.

Abstract

We investigate term structure models driven by Wiener processes and Poisson measures with forward curve dependent volatilities. This includes a full existence and uniqueness proof for the corresponding Heath-Jarrow-Morton type term structure equation. Furthermore, we characterize positivity preserving models by means of the characteristic coefficients, which was open for jump-diffusions. Additionally we treat existence, uniqueness and positivity of the Brody-Hughston equation of interst rate theory with jumps, an equation which we believe to be very useful for applications.

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