

# Joint Risk & Stochastics and Financial Mathematics Seminar in 2015/16

Seminars are listed in reverse chronological order, most recent first

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30 June - Johannes Muhle-Karbe (Michigan) Inform6/((M)4i)3(c)-7(a)4(l)3(ted)4, 6uhl





Ioannis Karatzas [2], we introduce a class of processes which are polynomial in the sense of [1] to model both, asset prices (or market capitalizations of companies in an equity market) and their corresponding market weights. More precisely, we characterize the class of polynomial diffusion models for the asset price process whose market weights process is again a polynomial diffusion process on the unit simplex. Explicit parameter conditions assuring the existence of relative ar

**28 January - Alexandru Hening (Oxford)**

**Killed Brownian motion with a prescribed lifetime distribution and models of default**

Abstract: In finance, the default time of a counterparty is sometimes modeled as the first passage time of a credit index process below a barrier. It is therefore relevant to consider the following question: If we know the distribution of the default time, can we find a unique barrier which gives this distribution? This is known as the Inverse First Passage Time (IFPT) problem in the literature. We consider a more general 'smoothed' version of the

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