Einladung

zum Vortrag im Rahmen des **SFB Colloquiums** (Standort Linz), mit dem Titel

Controlled risk models and an application of the QMC-method

VORTRAGENDER: **Stefan Thonhauser**, TU Graz
DATUM: Dienstag, 4. Dezember 2018
ZEIT: 14:30 Uhr
ORT: Science Park 2, S2 120, JKU Linz

Abstract: In this talk we will discuss dynamic reinsurance strategies in risk models. In contrast to mathematical finance, risk models are based on stochastic processes having sample paths of finite variation which comprise jumps. For such models dynamic reinsurance can be considered as control of the jump size distribution. When studying associated optimization problems it turns out that the choice of the value functions' initial value is delicate, both from an analytical and numerical perspective. Here simulation methods can be used to improve the situation. We will illustrate the use of QMC methods in the particular case of risk models of piecewise deterministic Markov type.

Das **SFB Colloquium** wird vom **FWF Special Research Program (SFB) Quasi-Monte Carlo Methods: Theory and Application** unterstützt