

The Working Group on Risk - CREAR, with the support of the IDS dpt & CoE Capital Markets - Regulation, Institut des Actuaire, Labex MME-DII and the group BFA (SFdS), has the pleasure to invite you to the Seminar by:

Prof. Marie KRATZ

ESSEC Business School, CREAR risk research center

March 8, 2017, 12:30pm – 1:30pm  
EEE - ESSEC La Défense (CNIT) – Amphi 103

## An Implicit Backtest for Expected Shortfall Via a Simple Multinomial Approach

Replacing Value-at-Risk (VaR) by Expected Shortfall (ES) in Basel 3 is under current discussion, as ES is in general a better risk measure than VaR, more reliable tool for risk management. Hence the question of providing a backtest for ES, as handy in practice as the popular binomial backtest based on a violation process, used for the VaR. It is what we propose in this study. Following the idea by Emmer *et al.* of considering an empirical approach that consists in replacing ES by a set of a small number of quantiles for the backtesting, comes the natural proposition of a simple multinomial approach to backtest ES. It turns out to give good results, certainly much better than with the binomial backtest, helping to distinguish between models. This is a joint work with Yen Lok and Alexander McNeil (York Univ., UK) (see [papers.ssrn.com/sol3/papers2.cfm?abstract\\_id=2898688](http://papers.ssrn.com/sol3/papers2.cfm?abstract_id=2898688)).

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# Prof. Marie KRATZ

## ESSEC Business School, CREAR

**Marie Kratz** is Professor at ESSEC Business School and Director of its risk research center, CREAR. She is a Fellow (Actuaire Agrégée) of 'Institut des Actuaires' (French Institute of Actuaries). She holds a Doctorate in Applied Mathematics (UPMC-Paris 6; carried out to a great extent at the *Center for Stochastic Processes*, Chapel Hill, North Carolina) & Habilitation (HDR), did a post-doc at Cornell University. Her research addresses a broad range of topics in probability, statistics and actuarial mathematics, with a focus on extreme value theory, risk analysis & management, and the study of random excursion sets. These fields find natural applications in Finance and Actuarial Sciences that she is developing at ESSEC. Marie coordinates the ESSEC-ISUP (Paris 6) Actuarial Track and is President of the Group *Banque Finance Assurance* of SFdS.



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