

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

**Dr. Peter ENGLAND**  
Director at TOWER WATSON, UK

**October 13, 2016, 12:30pm – 1:30pm**  
**EEE - ESSEC La Défense (CNIT) – Amphi 103**

## **An Introduction to Stochastic Reserving using Bootstrapping**

### **Part 1 – The Lifetime View of Reserve Risk**

This presentation will introduce bootstrapping as a statistical technique to obtain a distribution of parameters, which when supplemented by a second simulation process for forecasting (conditional on the parameters), gives a predictive distribution. This two stage simulation process will be applied to give predictive distributions for two well-known stochastic reserving models, the Over-dispersed Poisson chain ladder model, and Mack's model. The characteristics of each model, and when to use each one, will be discussed. A modus operandi for analyzing reserve risk will also be presented.

*Part 2 – The One-Year View of Risk and Beyond (October 19, 2016; 12h15-13h45)*

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*For any information, please contact  
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**Dr. Peter ENGLAND**  
**Director at TOWERS WATSON, UK**

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Peter England has over 20 years' experience of financial and statistical modeling, predominantly in the Property & Casualty sector of the insurance industry. He is currently Towers Watson's Global Product Leader for P&C Reserving Software.

Peter has a BSc and PhD in Actuarial Science from City University, London. He is a Chartered Statistician, and an Honorary Fellow of the UK Institute and Faculty of Actuaries (IFoA).

Peter is the (co)-author of numerous papers, including the prize-winning Institute of Actuaries paper "Stochastic Claims Reserving in General Insurance". In 2014, he was given **Towers Watson's Syl Schieber Award for contributions to research and intellectual capital in insurance.**



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