The Working Group on Risk, with the support of the group BFA (SFdS) and of the Institute of Actuaries (IA), has the pleasure to invite you to the Seminar by:

Dr. Arnaud GUYADER

MCF, Université Rennes 2

October, 21, 2013 at 12:30 pm EEE - ESSEC La Défense – room 203

Simulation and Estimation of Extreme Quantiles and Extreme Probabilities

The purpose of this talk is to present a recent efficient adaptative algorithm for estimating rare events in a static situation, in particular a tail probability given a quantile or a quantile given a tail probability. This algorithm belongs to the family of multilevel splitting methods, which means that it proceeds by successive elementary steps, each one being based on Metropolis-Hastings algorithm. It can be analyzed using the theory of Poisson process, which leads to an exact description of the distribution of the estimated probabilities and quantiles. This presentation is based on a joint work N. Hengartner (Los Alamos National Laboratory, USA) and E. Matzner-Lober (Univ. Rennes 2).





For any information, please contact Frédérique JEAN-LOUIS (01 34 43 32 49 / jeanlouis@essec.fr)

Arnaud GUYADER

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Arnaud Guyader, Maître de Conférences at Univ. Rennes 2 since 2003, defended his Habilitation Thesis in 2011.

His fields of interest are nonparametric statistics and Monte Carlo techniques for rare event estimation.

