

Monday  
November 18,  
2019

12:30 pm  
(CET)

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:

## Prof. Arthur CHARPENTIER

Université du Québec à Montréal - UQAM

### “Insurance Pricing in a Competitive Market”

*at ESSEC La Défense (CNIT) – Salle 202, 12:30-1:30pm*

Insurance is usually defined as "the contribution of the many to the misfortune of the few". This idea of pooling risks together using the law of large number legitimates the use of the expected value as actuarial "fair" premium. In the context of heterogeneous risks, nevertheless, it is possible to legitimate price segmentation based on observable characteristics. But in the context of "Big Data", intensive segmentation can be observed, with a much wider range of offered premium, on a given portfolio. In this talk, we will briefly get back on economical, actuarial and philosophical approaches of insurance pricing, trying to link a fair unique premium on a given population and a highly segmented one. We will then get back on recent experiments (so-called "actuarial pricing game") organized since 2015, where (real) actuaries were playing in competitive (artificial) market, that mimic real insurance market. We will get back on conclusions obtained on two editions, the first one, and the most recent one, where a dynamic version of the game was launched.

Financial support from ESSEC Research Center and LabEx MME-DII is gratefully acknowledged.

For any information:  
Stéphanie Martinez – 0134433797 - [martinez@essec.edu](mailto:martinez@essec.edu)  
<http://crear.essec.edu/working-group-on-risk>



Labex MME-DII  
Modèles Mathématiques et Économiques de la  
Dynamique, de l'incertitude et des Interactions

INSTITUT DES  
ACTUARIAIRES



Banque  
Finance  
Assurance

# Prof. Arthur CHARPENTIER

Université du Québec à Montréal (UQAM)  
Canada

---

**Arthur Charpentier**, Professor in Actuarial Sciences at the University of Québec, Montreal, is in charge of the program 'Data Science pour l'Actuariat' - Institut des Actuaire. Arthur is the author of academic papers and co-author of the book 'Mathématiques de l'Assurance Non-Vie' (Economica). He is also Editor of Computational Actuarial Science with R (CRC Press) and editor of the blog: <https://freakonometrics.hypotheses.org/>



**Labex MME-DII**  
Modèles Mathématiques et Économiques de la  
Dynamique, de l'Incertitude et des Interactions



Banque  
Finance  
Assurance