

Pierre-O. Goffard

Assistant professor in applied mathematics

UCSB
Departments of Statistics
and Applied Probability
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French, 27 years old



Professional experience

- Since September 2016 **Visiting Assistant Professor**, *University of California in Santa Barbara*, Santa Barbara, USA.
- 2015–2016 **Post-Doctoral fellow**, *Université Libre de Bruxelles*, Brussels, Belgium.
- Aug.-November 2015 **Post-Doctoral fellow**, *Aarhus university*, Aarhus, Denmark.
- 2011–2015 **Ph.D. Student and junior actuary**, *Aix-Marseille university* and *AXA France* (french partnership named convention CIFRE), Marseille, France.

Education

- 2011–2015 **Ph.D. in applied mathematics**, *Aix-Marseille University* and *AXA France* (french partnership named convention CIFRE), Marseille, France.
Polynomial approximations of probability density function and applications to insurance.
Advisors: Denys Pommeret and Stephane Loisel.
- 2008–2011 **Master of Science (M. Sc.)**, *ENSAI*, Rennes, France.
◦ Major: Advanced Statistical Engineering
◦ Additional training (during the 3rd year, 2010–2011): Master of statistics and econometrics at the *University of Rennes 1*, focused on scientific research, in tandem with ENSAI engineering degree.
- 2006–2008 **Classes Préparatoires**, *Dupuy de Lôme High School*, Lorient, MP.
2 years of intensive training in Math, Physics and Chemistry.

Skills

- Technical Probability and statistics for finance and insurance (or anything else)
- IT R Studio, SAS, Mathematica, Matlab, Java, HTML, CSS, Ruby, Markdown, *Latex*
- Languages French (*mother tongue*), English (*full professional proficiency*), Spanish (*notions*).

Research Expertise

Risk theory, numerical methods, boundary crossing problem, stochastic processes..

Teaching experience

- 2015 **Teaching assistant**, *Aarhus University*, Aarhus, Denmark.
Bachelor in various fields
◦ Introduction to calculus (undergraduate class, 21h)
- 2013–2014 **Teaching assistant**, *ENSAI*, Rennes, France.
Master in statistical engineering
◦ Introduction to ruin theory (graduate class, 6h)
- 2011–2014 **Teaching assistant**, *Aix-Marseille University*, Marseille, France.
Bachelor of Biology
◦ Introduction to statistical analysis (undergraduate class, 30h)
Bachelor of mathematics applied to social science
◦ Advanced probability and statistics (undergraduate class, 30h)
Master in actuarial science
◦ Introduction to ruin theory (graduate class, 6h)

Publications

Accepted/Published

- 2016 **P.O. Goffard, & Claude Lefèvre**, *Boundary crossing problem of order statistic point processes*, Journal of Mathematical Analysis and Applications.
- 2015 **P.O. Goffard & Xavier Guerrault**, *Is it optimal to group policyholders by age, gender, and seniority for BEL computations based on model points?*, European Actuarial Journal.
- 2015 **P.O. Goffard, Stephane Loisel & Denys Pommeret**, *A polynomial expansion to approximate the ultimate ruin probability in the compound Poisson ruin model*, Journal of Computational and Applied Mathematics.
- 2015 **P.O. Goffard, Stephane Loisel & Denys Pommeret**, *Polynomial approximations for bivariate aggregate claims amount probability distributions*, Methodology and Computing in Applied Probability.

Submitted/under revision

- 2016 **P.O. Goffard, & Claude Lefèvre**, *Duality in ruin problems for ordered risk models*, Working paper.
- 2015 **Søren Asmussen, P.O. Goffard, & Patrick Laub**, *Orthonormal polynomial expansion and lognormal sum densities*, Working paper.

Selected communications

- France 2016 3rd **European Actuarial Journal Conference**, Lyon.
- France 2016 3rd **of young researchers in probability, numerics and finance**, Le Mans.
- France 2016 **AMERISKA Conference**, Paris.
- Belgium 2016 **Joint ULB-UCL seminar**, Brussels.
- France 2016 **Thematic week on dependence, extreme and actuarial science**, Marseille.
- UK 2015 **CASS Business School Seminar**, London.
- Denmark 2015 **Thiele Seminar**, Aarhus.
- France 2015 **Université d'été de l'institut des actuaires**, Brest.
- France 2015 **PhD Thesis oral defense**, Marseille.
- UK 2015 19th **International Congress on insurance, mathematics, and economics**, Liverpool.
- France 2014 46^{ème} **journées de statistique**, Rennes.
- Germany 2013 **Conference on Advances in Financial and Insurance Risk Manangement**, Munich.
- France 2013 5^{ème} **Rencontre des Jeunes Statisticiens**, Aussois.
- France 2013 45^{ème} **journées de statistique**, Toulouse.
- Switzerland 2013 **Perspective on Actuarial Risks in Talks of Young Researchers**, Ascona.

Awards

- France 2015 **SCOR prize** of the young doctor in actuarial science, Paris.

Refereing activities

Methodology and Computing in Applied Probability , MCAP.

Hobbies

- Music Campfire guitar player
- Sports Surf, windsurf, soccer