# **SCAILLET Olivier**

Rue Pramedzi CH – 1908 Riddes ☎(office) : + 41 22 379 88 16 ☎(fax) : + 41 22 379 81 04 ☎(mobile) : + 41 78 721 89 00 Email: olivier.scaillet@unige.ch Birth date : 15/08/68 Married Belgo-Swiss

# EMPLOYMENT

Professor of finance and statistics at Université de Genève. Senior Chair at Swiss Finance Institute. Deputy Director (research) at Geneva Finance Research Institute. Treasurer of the European Standing Committee of the Econometric Society.

# THESIS

January 1996 : Ph. D. Thesis from Université Paris IX Dauphine, U.F.R. Mathématiques de la décision : "Modelling and Estimation of the Term Structure of Interest Rates", mention très honorable avec félicitations du jury (unanimité). Jury : Christian Gouriéroux (Director), André Farber, Jean-Pierre Florens, Valentine Genon-Catalot, Alain Monfort, Patrice Poncet.

Grants from the CIM (Collège Interuniversitaire d'études doctorales dans les sciences du Management) obtained for 1993-1994, 1994-1995, 1995-1996 for a project under the direction of André Farber, professor at ULB.

# **EDUCATION**

- 1993 1994 : DEA MASE (Mathématiques Appliquées aux Sciences Economiques), Université Paris IX Dauphine.
  \* Dissertation title : "Estimation des structures par terme de taux d'intérêt", Director : P. Cazes.
- 1991 1993 : Master in statistics, Université Libre de Bruxelles (ULB) (La Plus Grande distinction).
  \* Dissertation title : "Modèles conditionnellement hétéroscédastiques", Director : G. Mélard.
- 1986 1991 : Business degree (Ingénieur de gestion), Finance Option, Ecole de Commerce Solvay, ULB (Grande Distinction).
  \* Dissertation title : "Recherche des valeurs optimales des indicateurs techniques (cas des taux de change)", Director : G. Mélard.
  \* Exchange program with Ecole Supérieure de Commerce de Paris (Sep. 90 -Feb. 91).

## SCIENTIFIC ACTIVITY

#### Elected Fellow of SoFiE (Society of Financial Econometrics)

#### Books:

- <u>Econométrie de la Finance : Analyses Historiques</u>, with C. Gouriéroux and A. Szafarz, Collection "Economie et Statistiques Avancées", Editions Economica, Paris (1997).

#### **Publications:**

- "Estimation d'équations de diffusion à partir d'observations discrètes et de méthodes fondées sur des simulations" with L. Broze and J.M. Zakoïan, *Mélanges en l'honneur de Simone Huyberechts, Cahiers du CERO*, Vol. 36, (1994), 43-55.

- "Testing for continuous-time models of the short-term interest rate" with L. Broze and J.M. Zakoïan, *Journal of Empirical Finance*, Vol. 2, (1995), 199-223.

- "Options on futures and forward contracts in the affine term structure model", with B. Leblanc, *Advances in Futures and Options Research*, Vol. 8, (1995), 241-261.

- "Compound and exchange options in the affine term structure model", *Applied Mathematical Finance*, Vol. 3, (1996), 75-92.

- "Estimation de modèles de la structure par terme des taux d'intérêt" with L. Broze and J.M. Zakoïan, *Revue Economique*, *XLIV Congrès de l'AFSE*, Vol. 47, N° 3, (1996), 511-519.

- "Unemployment insurance and mortgages" with C. Gouriéroux, *Insurance : Mathematics and Economics*, 20, (1997), 173-195.

- "Comparaison de la rentabilité historique de l'immobilier, des actions, des obligations et du monétaire" with T. de Roquemaurel, *Banque et Marchés*, 28, (1997), 16-20.

- "Instrumental models and indirect encompassing" with G. Dhaene and C. Gouriéroux, *Econometrica*, 66, (1998), 673-688.

- "Quasi indirect inference for diffusion processes" with L. Broze and J.M. Zakoïan, *Econometric Theory*, 14, (1998), 161-186.

- "Path dependent options on yields in the affine term structure model", with B. Leblanc, *Finance and Stochastics*, 2, (1998), 349-367.

- "A new index of Belgian shares" with R. Anderson and D. Reinard, *Revue de la Banque*, 3, (1998), 126-130.

- "Analyse empirique de la théorie des anticipations de la structure par terme des taux d'intérêt", *Bulletin du Service d'Analyse Economique de l'IRES*, Janvier, (1998), 101-127.

- "Multiregime term structure models" with C. Gouriéroux, *Revue Finance*, Special issue on financial econometrics, 19, 2, (1998), 71-92.

- "Lookback and barrier options: A comparison between Black-Scholes and ACB pricing", with J.L. Prigent and O. Renault, *Revue Finance*, Special issue on exotic options, 20, 2, (1999), 143-152.

- "Convergence of discrete time option pricing models under stochastic interest rates" with J.P. Lesne and J.L. Prigent, *Finance and Stochastics*, 4, (2000), 81-93.

- "A correction note on the first passage time of an Ornstein-Uhlenbeck process to a boundary" with B. Leblanc and O. Renault, *Finance and Stochastics*, 4, (2000), 109-111.

- "Sensitivity analysis of Value at Risk" with C. Gouriéroux and J.P. Laurent, *Journal of Empirical Finance, Bi-Annual Award Winning Paper of Best Paper Published in JEF*, 7, (2000), 225-245.

- "An autoregressive conditional binomial option pricing model" with J.L. Prigent and O. Renault, in *Selected papers of the First World Congress of the Bachelier Finance Society*, eds Géman, Madan, Pliska and Vorst, Springer Verlag, Heidelberg, (2001), 353-373, *Inquire UK prize 2001*.

- "An empirical investigation in credit spread indices", with J.L. Prigent and O. Renault, *Journal of Risk*, 3, (2001), 27-55.

- "The dynamics of US credit spread indices" with O. Renault, *European Investment Review*, 1, (2002), 45-49.

- "A nonparametric analysis of stock index return dependence through bivariate copulas", *European Investment Review*, 1, (2002), 7-16.

- "Indirect inference, nuisance parameter and threshold moving average models" with A. Guay, *Journal of Business and Economic Statistics*, 21, (2003), 122-132.

- "Nonparametric estimation of copulas for time series", with J.D. Fermanian, *Journal of Risk*, 5, (2003), 25-54.

- "The origin and development of VaR", in *Modern Risk Management: A History, 15th anniversary of Risk Magazine, Risk Publications, (2003), 151-158.* 

- "Nonparametric estimation and sensitivity analysis of expected shortfall", *Mathematical Finance*, 14, (2004), 115-129.

- "Option pricing with discrete rebalancing" with J.L. Prigent and O. Renault, *Journal of Empirical Finance*, 11, (2004), 133-161.

- "Density estimation using inverse and reciprocal inverse Gaussian kernels", *Journal of Nonparametric Statistics*, 16, (2004), 217-226.

- "Testing for concordance ordering", with A. Cebrian and M. Denuit, *Astin Bulletin*, 34, (2004), 151-173.

- "Nonparametric tests for positive quadrant dependence", with M. Denuit, *Journal of Financial Econometrics*, 2, (2004), 422-450.

- "On the Way to Recovery: A Nonparametric Bias Free Estimation of Recovery Rate Densities", with O. Renault, *Journal of Banking and Finance*, 28, (2004), 2915-2931.

- "Some statistical pitfalls in copula modeling for financial applications" with J.D. Fermanian, in *Capital Formation, Governance and Banking*, Nova Science Publishers (2005), 57-72.

- "Nonparametric estimation of conditional expected shortfall", *Revue Assurances et Gestion des Risques/Insurance and Risk Management Journal*, 72, (2005), 639-660.

- "Sensitivity Analysis of VaR and Expected Shortfall for Portfolios under Netting Agreements", with J.D. Fermanian, *Journal of Banking and Finance*, 29, (2005), 927-958.

- "Consistency of asymmetric kernel density estimators and smoothed histograms with application to income data", with T. Bouezmarni, *Econometric Theory*, 21, (2005), 390-412.

- "Estimation of recovery rate densities: non-parametric and semi-parametric approaches versus industry practice" with M. Hagmann and O. Renault, in *Recovery Risk: The Next Challenge in Credit Risk Management*, Eds: Resti, A., Sironi, A., Altman E., Risk Publications, London, (2005), 323-346.

- "A Kolmogorov-Smirnov type test for positive quadrant dependence", *Canadian Journal of Statistics*, 33, (2005), 415-427.

- "A fast subsampling method for nonlinear dynamic models", with H. Hong, *Journal of Econometrics*, 133, (2006), 557-578.

- "Optimal asset management for pension funds" with F. Menoncin, *Managerial Finance*, 32, (2006), 347-374.

- "Kernel based goodness-of-fit tests for copulas with fixed smoothing parameters", *Journal of Multivariate Analysis*, 98, (2007), 533-543.

- "Theory and calibration of Swap Market Models", with S. Galluccio, Z. Huang and J.-M. Ly, *Mathematical Finance*, 17, (2007), 111–141.

- "The estimation of copulas: theory and practice" with A. Charpentier and J.-D. Fermanian, in *Copulas: From theory to application in finance*, Ed: Rank J., Risk Publications, London, (2007), Section2.

- "A Kolmogorov-Smirnov type test for shortfall dominance against parametric alternatives" with M. Denuit and A.C. Goderniaux, *Technometrics*, 49, (2007), 88-99.

- "Multivariate wavelet-based shape preserving estimation for dependent observations", with A. Cosma and R. von Sachs, *Bernoulli*, 13, (2007), 301-329.

- "Approximation and calibration of short-term implied volatilities under jumpdiffusion stochastic volatility", with A. Medvedev, *Review of Financial Studies*, 20, (2007), 427-459.

- "Optimal asset allocation for pension funds under mortality risk during the accumulation and decumulation phases", with P. Battocchio and F. Menoncin, *Annals of Operations Research*, 142, (2007), 141-165.

- "Linear-quadratic jump-diffusion models with application to stochastic volatility", with P. Cheng, *Mathematical Finance*, 17, (2007), 575-598.

- "Local multiplicative bias correction for asymmetric kernel density estimators", with M. Hagmann, *Journal of Econometrics*, 141, (2007), 213-249.

- "Semiparametric methods in econometrics: Guest editorial", with M. Fernandes and O. Linton, *Journal of Econometrics*, 141, (2007), 1-4.

- "Business and financial Indicators: what are the determinants of default probability changes?", with F. Couderc and O. Renault, in *Credit Risk : Models, Derivatives, and Management*, Chapman & Hall, Financial Mathematics Series, (2008), 235-268.

- "Testing for equality betwen two copulas", with B. Rémillard, *Journal of Multivariate Analysis*, 100, (2009), 377-386.

- "Assessing multivariate predictors of financial market movements: A latent factor framework for ordinal data", with P. Huber and M.-P. Victoria-Feser, *Annals of Applied Statistics*, 3, (2009), 249-271.

- "Local transformation kernel density estimation of loss distributions", with J. Gustafsson, M. Hagmann, and J. P. Nielsen, *Journal of Business and Economic Statistics*, 27, (2009), 161-175.

- "Testing for threshold effect in ARFIMA models: Application to US unemployment rate data", with A. Lahiani, *International Journal of Forecasting*, 25, (2009), 418-428.

- "Testing for stochastic dominance efficiency", with N. Topaloglou, *Journal of Business and Economic Statistics*, 28, (2010), 169-180.

- "False discoveries in mutual fund performance: Measuring luck in estimated alphas", with L. Barras and R. Wermers, *Journal of Finance*, 65, (2010), 179-216, Swiss Finance Institute / Banque Privée Espirito Santo Award Prize 2008.

- "Pricing American options under stochastic volatility and stochastic interest rates", with A. Medvedev, *Journal of Financial Economics*, 98, (2010), 145-159.

- "Swap market models", with S. Galluccio, in *Encyclopedia of Quantitative Finance*, (2010), John Wiley & Sons Ltd.

- "CMS spread options", with S. Galluccio, in *Encyclopedia of Quantitative Finance*, (2010), John Wiley & Sons Ltd.

- "Weather derivatives", with P. Barrieu, in *Encyclopedia of Quantitative Finance*, (2010), John Wiley & Sons Ltd.

- "A primer on weather derivatives", with P. Barrieu, in *Handbook on Uncertainty and Environmental Decision Making*, (2010), International Series in Operations Research and Management Science, Springer Verlag.

- "Tikhonov regularisation for nonparametric instrumental variable estimators", with P. Gagliardini, *Journal of Econometrics*, 167, (2012), 61-75.

- "Nonparametric instrumental variable estimators of quantile structural effects", with P. Gagliardini, *Econometrica*, 80, (2012), 1533-1562.

- "Robust subsampling", with L. Camponovo and F. Trojani, *Journal of Econometrics*, 167, (2012), 197-210.

- "Technical trading revisited: persistence tests, transaction costs, and false discoveries", with P. Bajgrowicz, *Journal of Financial Economics*, 106, (2012), 473-491.

- "Hedge fund managers: luck and dynamic assessment", with G. Criton, *Bankers, Markets & Investors*, 129, (2014), 1-15.

- "Testing for symmetry and conditional symmetry using asymmetric kernels", with M. Fernandes and E. Mendes, *Annals of the Institute of Statistical Mathematics*, 67, 4, (2015), 649-671.

- "Jumps in high-frequency data: spurious detections, dynamics and news", with P. Bajgrowicz and A. Treccani, *Management Science*, 62, 8, (2016), 2198-2217.

- "Time-varying risk premium in large cross-sectional equity datasets", with P. Gagliardini and E. Ossola, *Econometrica*, 84, 3, (2016), 985-1046.

- "On ill-posedness of nonparametric instrumental variable regression with convexity constraints", *The Econometrics Journal*, 19, (2016), 232-236.

- "Comments on : Nonparametric Tail Risk, Stock Returns and the Macroeconomy", with L. Camponovo and F. Trojani, *Journal of Financial Econometrics*, 15, (2017), 377-387.

- "A specification test for nonparametric instrumental variable regression", with P. Gagliardini, *Annals of Economics and Statistics, Special Issue on "Inverse Problems in Econometrics*", 128, (2017), 151-201.

- "High-frequency jump analysis of the bitcoin market", with A. Treccani and C. Trevisan, forthcoming in a special issue of the *Journal of Financial Econometrics* dedicated to blockchain and cryptocurrencies.

- "Early exercise decision in American options with dividends, stochastic volatility and jumps", with A. Cosma, S. Galluccio, and P. Pederzoli, forthcoming in the *Journal of Financial and Quantitative Analysis*.

- "Spanning Tests for Markowitz Stochastic Dominance", with S. Arvanitis and N. Topaloglou, forthcoming in the *Journal of Econometrics*, Special issue on Nonlinear Financial Econometrics.

### Discussion papers and work in progress:

- "Estimation of models with ARCH errors and applications" with R. Azrak and G. Mélard, User's guide TSE Time Series Software, 1993.

- "Estimation of the term structure from bond data" with C. Gouriéroux, CREST DP 9415 and CEPREMAP DP 9415.

- "Forecast intervals in ARCH exponential smoothing" with L. Broze and G. Mélard, CORE DP 9481 and CREST DP 9502.

- "A new index of Belgian shares" with R. Anderson and D. Reinard, IRES DP 9716.

- "Reconstitution de la courbe des taux zéro-coupon et modèles d'arbitrage" with A. Frachot, mimeo.

- "Variance optimal cap pricing models", with J.P. Laurent, IRES DP 9902 and CREST DP 9907.

- "Bartlett identities tests" with A. Chesher, G. Dhaene and C. Gouriéroux, IRES DP 9919, CREST DP 9932 and CORE DP 9939.

- "Reversed score and likelihood ratio tests", with Geert Dhaene, IRES DP2026 and CREST DP 2000-60.

- "Weak convergence of hedging strategies of contingent claims", with J.L. Prigent, FAME DP 39 and HEC Genève DP 2002-02.

- "Mortality risk and real optimal asset allocation for pension funds", with F. Menoncin, FAME DP 101 and HEC Genève DP 2003.23.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, Swiss Finance Institute DP 2016.51.

- "Predictability Hidden by Anomalous Observations", with L. Camponovo and F. Trojani, Swiss Finance Institute DP 2012.05.

- "Time-Varying Risk Premia in Large International Equity Markets", with I. Chaieb and H. Langlois, Swiss Finance Institute DP 2018.04.

- "The cross-sectional distribution of fund skill measures", with L. Barras and P. Gagliardini, Swiss Finance Institute DP 2018.66.

#### Seminars and Conferences (last 3 years):

"Pricing American options using fast recursive projections", with A. Cosma, S. Galluccio, and P. Pederzoli, seminar at University of Orleans, Orleans, January 2016.
"A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, DagStat (invited speaker), Goettingen, March 2016.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, Econometrics Seminar at University College of London, London, May 2016.

- "Pricing American options using fast recursive projections", with A. Cosma, S. Galluccio, and P. Pederzoli, FERM2016 conference, Guangzhou, June 2016.

- "Comments on : Nonparametric Tail Risk, Stock Returns and the Macroeconomy", with L. Camponovo and F. Trojani, SoFiE conference, Hong Kong, June 2016.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, Invited speaker at SoFiE conference, Hong Kong, June 2016.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, CEMFI seminar, Madrid, October 2016.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, FMA international 2016, Las Vegas, October 2016.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, seminar at Pittsburgh University, Pittsburgh, November 2016.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, seminar at PennState University, State College, November 2016.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, seminar at Federal Reserve Board of Governors, Washington DC, November 2016.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, seminar at University of Surrey, Guildford, November 2016.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, seminar at University of Cergy-Pontoise, Cergy-Pontoise, January 2017.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, seminar at Ecole Hotelière de Lausanne, Lausanne, February 2017.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, seminar at University of Illinois, Urbana-Champaign, April 2017.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, seminar at University of Aarhus, Aarhus, April 2017.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, Seminar at Athens University of Economics and Business, Athens, May 2017.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, Stochastic dynamic models confrence, Lausanne, June 2017.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, "Meeting in econometrics" conference, Toulouse, June 2017.

- "High-frequency jump analysis of the bitcoin market", with A. Treccani and C. Trevisan, "Market microstructure and high-frequency data" conference, Chicago, June 2017.

- "High-frequency jump analysis of the bitcoin market", with A. Treccani and C. Trevisan, invited session at ISI conference, Marrakech, July 2017.

- "Saddlepoint techniques for spatial panel data models", with C. Jiang, D. La Vecchia and E. Ronchetti, seminar at University of Orleans, Orleans, September 2017.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, invited speaker at Financial Econometrics conference at Boston University, Boston, September 2017.

- "Time-varying risk premia in large international equity markets", with I. Chaieb and H. Langlois, Finance seminar at Boston University, Boston, September 2017.

- "Time-varying risk premia in large international equity markets", with I. Chaieb and H. Langlois, Big Data worshop at PUC University, Rio, October 2017.

- "A diagnostic criterion for approximate factor structure", with P. Gagliardini and E. Ossola, keynote speaker at 3<sup>rd</sup> International Financial Econometrics conference, Porto Seguro, October 2017.

- "Saddlepoint techniques for spatial panel data models", with C. Jiang, D. La Vecchia and E. Ronchetti, Conference in honor of Luc Bauwens, Brussels, October 2017.

- "Saddlepoint techniques for spatial panel data models", with C. Jiang, D. La Vecchia and E. Ronchetti, Econometrics seminar at University of Lille, Lille, December 2017.

- "Saddlepoint techniques for spatial panel data models", with C. Jiang, D. La Vecchia and E. Ronchetti, Statistic Seminar at University of Chicago, Chicago, April 2018.

- "Time-varying risk premia in large international equity markets", with I. Chaieb and H. Langlois, Seminar at University of Chicago, Chicago, April 2018.

- "Time-varying risk premia in large international equity markets", with I. Chaieb and H. Langlois, Seminar at Northwestern University, Chicago, April 2018.

- "Time-varying risk premia in large international equity markets", with I. Chaieb and H. Langlois, Financial Econometrics conference, Toulouse, May 2018.

- "Time-varying risk premia in large international equity markets", with I. Chaieb and H. Langlois, ISAG seminar, Geneva, May 2018.

- "Spanning Tests for Markowitz Stochastic Dominance", with S. Arvanitis and N. Topaloglou, Swiss Finance Institute research days, Gerzensee, June 2018.

- "The cross-sectional distribution of fund skill measures", with L. Barras and P. Gagliardini, ISNPS 2018, Salerno, June 2018.

- "Time-varying risk premia in large international equity markets", with I. Chaieb and H. Langlois, ICSA conference, Qingdao, July 2018.

- "Saddlepoint techniques for spatial panel data models", with C. Jiang, D. La Vecchia and E. Ronchetti, EEA-ESEM congress, Cologne, August 2018.

- "Saddlepoint techniques for spatial panel data models", with C. Jiang, D. La Vecchia and E. Ronchetti, Economics seminar at McGill University, Montréal, September 2018.

- "Time-varying risk premia in large international equity markets", with I. Chaieb and H. Langlois, Finance seminar at HEC Montréal, Montréal, September 2018.

- "The cross-sectional distribution of fund skill measures", with L. Barras and P. Gagliardini, Statistics seminar at UNIGE, Genève, October 2018.

- "The cross-sectional distribution of fund skill measures", with L. Barras and P. Gagliardini, Finance seminar at University of Luxembourg, Luxembourg, November 2018.

- "The cross-sectional distribution of fund skill measures", with L. Barras and P. Gagliardini, Finance seminar at ULB, Brussels, December 2018.

### Invitations (last 3 years):

Université d'Orléans, Orléans, January 2013/14/15/16/17/18/19 (1 week); ); Université de Cergy-Pontoise, Cergy-Pontoise January 2013/14/15/16/17/18/19 (1 week); ENSAE-CREST, Paris, June 2013 (3 weeks); Fundacion Getulio Vargas, Sao Paulo, September 2013 (2 weeks); Stevanovich center at University of Chicago, May 2015 (one week) April 2017 (one week) April 2018 (one week).

### *Referee's activity:*

Econometrica; Review of Economic Studies; Review of Economics and Statistics; Economic Journal; Proceedings of the National Academy of Science (PNAS); Management Science; Operations Research; Journal of the American Statistical Association; Journal of the Royal Statistical Society B; Biometrika; Journal of Econometrics; Econometric Theory; Econometrics Journal; Journal of Financial Econometrics; Journal of Applied Econometrics; Econometric Reviews; Statistica Sinica; Journal of Business and Economic Statistics; Annals of Statistics; Annals of Applied Statistics; Canadian Journal of Statistics; Journal of Statistical Planning and Inference; Journal of Multivariate Analysis; Scandinavian Journal of Statistics; Journal of Nonparametric Statistics; International Journal of Forecasting; Journal of Economic Dynamics and Control; Journal of Mathematical Economics; Review of Financial Studies; Review of Finance; Review of Financial Economics; Journal of Empirical Finance; Journal of Banking and Finance; Journal of Money, Credit and Banking; Review of Derivatives Research; Journal of Financial Intermediation; Journal of Financial Markets; European Journal of Finance; International Review of Economics and Finance; Mathematical Finance; Finance and Stochastics; SIAM Journal of Financial Mathematics; Quantitative Finance Review; Algorithmic

Finance: Applied Mathematical Finance: International Journal of Computing Science and Mathematics; International Journal of Computer Mathematics; Insurance: Mathematics and Economics; Geneva Papers on Risk and Insurance; Journal of Risk; Journal of Credit Risk; Journal of Futures Markets; Risk; Computational Statistics and Data Analysis; Statistics and Probability Letters; Test; Communications in Statistics; Applied Stochastic Models in Business and Industry; Physica A; Statistics; Pakistan Journal of Statistics; Annals of Operations Research; European Journal of Operational Research; Mathematical and Computer Modelling; Journal of Computational and Applied Mathematics, Annales d'Economie et de Statistique; Revue Economique; Revue Finance; Revista Brasileira de Economia; Recherches Economiques de Louvain; Cahiers Economiques de Bruxelles; Fonds National de la Recherche Suisse; Italian Ministry for Education (MIUR); MITACS-NCE Canadian research funding; Conseil de recherches en sciences humaines du Canada; Natural Sciences and Engineering Research Council of Canada; ANR GIP France; ERCl Advanced Grant scheme and IDEAS program; Fonds québécois de recherche sur la nature et les technologies; Expert for AERES evaluation of GREQAM Marseille.

## Participation to Editorial Boards:

Journal of Business and Economic Statistics (Associate Editor: 2007- ); Econometric Theory (Associate Editor: 2011- ); Econometrics Journal (Associate Editor: 2012- ); Journal of Econometrics (Co-Editor: special issue "Semiparametric methods in econometrics", 2007; Co-Editor: special issue "Nonlinear financial econometrics", 2018; Associate Editor: 2017- ) Management Science (Associate Editor: 2012-2016); Journal of Banking and Finance (Associate Editor: 2011- ); Stat (Associate Editor: 2012- ); Stochastic analysis and Applications (Associate Editor: 2013- ); Annals of Computational and Financial Econometrics (Associate Editor: 2013- ); Journal of Financial Econometrics (Co-Editor: special issue "(EC)2 Conference Econometrics of Financial and Insurance Risks", 2007); Revue Finance, Finance Letters ; Econometrics (Guest-Editor: special issue "Volatility modeling", 2018) Management Science: Distinguished Service Award 2013.

# PhD advisorships and Participation to PhD Juries and other Committees:

- Olivier Renault (UCL 2000) : co-advisor ; David Veredas (UCL 2002) : co-advisor; Francesco Menoncin (UCL 2003) : co-advisor ; Antonio Cosma (UCL 2004) : co-advisor ; Peng Cheng (FAME 2005) : advisor ; Zhijiang Huang (Swiss Finance Institute 2007) : advisor ; Laurent Barras (Swiss Finance Institute 2007) : co-advisor ; Matthias Hagmann (Swiss Finance Institute 2007) : co-advisor ; Amine Lahiani (Uni. de Genève 2008) : co-advisor ; Alexey Medvedev (Swiss Finance Institute 2008) : advisor ; Fabien Couderc (Swiss Finance Institute 2008) : advisor ; Enrico Schumann (Uni. de Genève 2010) : co-advisor ; Pierre Bajgrowicz (Uni. de Genève 2010) : advisor ; Gilles Criton (Uni. de Genève 2011) : advisor ; Adrien Treccani (Swiss Finance Institute, 2016) : advisor ; Paola Pederzoli (Swiss Finance Institute, 2018) : advisor ; Elisabeth Proehl (Swiss Finance Institute, 2018) : co-advisor.
- Pierre Tychon (UCL 1997) ; Pierre Giot (UCL 1999) ; Chrissopighi Braila (UCL 1999) ; Ricardo Calcagno (UCL 2001) ; Florian Heider (UCL 2001) ; Blanchet Scalliet (Uni. d'Evry 2001) ; Michael Westphallen (FAME 2002) ; Rosario del' Aquillla (USI 2002) ; Roger Walder (FAME 2002) ; Alexandre d'Aspremont (Ec.

Poly. Paris 2003); Olivier Roustand (ISFA 2003); Salwa Toumi (Uni. Cergy Pontoise 2003) ; Yan Li (Uni. Coll. London 2003) ; Mahfoudh Besbes Sana (Uni. Cergy Pontoise 2003) ; Malek Saihi (Uni. Paris IX-Dauphine 2004) ; Inass El Farissi (Uni. Cergy Pontoise 2004); Philippe Huber (Uni. Genève 2004); Erick Rengifo (UCL 2005) ; Antoine Chouillou (Uni. d'Evry 2005) ; Helena Beltran (UCL 2005) ; Mathieu Brezovski (Uni. Louis Pasteur 2005) ; Sandrine Henon (Uni. Marne La Vallée 2005); Fabrice Tahar (Uni. Cergy Pontoise 2005); Razvan Sufana (Uni. Toronto 2006); Yannick Malvergne (habilitation à diriger des recherches, Uni. Lyon 1 2006) ; Frédéric Babonneau (Uni. Genève 2006) ; Marc Bison (Tourou University International 2006); Aboubakar Hounkponou (Uni. Cergy Pontoise 2008); Kris Boudt (Katholieke Uni. Leuven 2008); Tomasz Wieladek (HEI 2008); Mohamed Houkari (ISFA Lyon 2008); Fausto Galli (UCL, 2009); Rania Hentati (Uni. Cergy Pontoise 2009); Farid Mkaouar (Uni. Cergy Pontoise 2009); Hachmi Ben Ameur (Uni. Cergy Pontoise 2009); Lorenzo Camponovo (USI 2009) ; Heni Boubaker (Université de Marseilles 2010) ; David Nicolay (Ecole Polytechnique 2011); Maroua Mhiri (Uni. Cergy Pontoise 2011); Bastien Drut (ULB et Uni. Paris Ouest 2011); Naceur Naguez (Uni. Cergy Pontoise 2011); Charles-Olivier Amédée-Manesme (Uni. Cergy Pontoise 2012); Grégoire Leblon (Uni. Rennes I 2012); Benoit Dewaele (ULB 2012); Myriam Ben Ayed (Uni. Cergy Pontoise 2013); Gerda Cabej (Uni. Genève 2013); Ramona Westermann (Swiss Finance Institute 2013); Elisa Ossola (Uni. Lugano 2013); Julien Cujean (Swiss Finance Institute 2013); Komlan Kouassi (Université de Strasbourg 2013); Ali Boudhina (HEC Montréal 2013); Nourdine Letifi (Uni. Cergy Pontoise 2013); Geogiana-Denisa Banulescu (Uni. Maastricht 2014); Julien Pénasse (Uni. Cergy Pontoise and Tilburg University 2014); Abdallah Ben Saida (Uni. Cergy Pontoise 2014); Gerda Cabej (Uni. Genève 2014); Lorenzo Frattarolo (Uni. Venice 2014); Alper Odabasioglu (Uni. Genève 2015); Guillaume Roussellet (Uni. Paris IX Dauphine 2015); Hela Maalej (Uni. Cergy Pontoise 2015); Simon Thévenin (Uni. Genève 2015); Sessi Tokpavi (habilitation à diriger des recherches, Uni. Paris Nanterre 2015); Mi Lim Kim (Uni. Cergy Pontoise 2016); Cesare Robotti (full professor promotion, Imperial College, 2016); Souleymane Laminou Abdou (Uni. de Rennes 2016); Sébastien Coupy (Swiss Finance Institute 2016) ; Christopher Trévisan (Swiss Finance Institute, 2016); Christopher Hemmens (Uni. Genève 2017); Anna Simoni (habilitation à diriger des recherches, Uni. Toulouse 2017) ; Piotr Orlowski (Uni. Lugano 2017); Nicola Fusari (Associate professor promotion, Johns Hopkins Carey business school, 2017).

## Participation to Scientific Committees and Scientific Councils:

Fifth workshop on econometrics and finance, Bruxelles, December 1997; Pricing and Managing Financial Assets in International Capital Markets, Le Mans, January 2000; PAI conference on financial econometrics, Leuven, January 2001; Conference on risk management, Hamam-Sousse, March 2001; AFFI 2001, Namur, June 2001; Journées Jeunes Economètres, Strasbourg, May 2002; AFFI 2002, Strasbourg, June 2002; EIR 2003, Geneve, September 2003; Demostafi, Quebec, May 2004; Semiparametrics in Rio, Rio, July 2004; CREDIT conference, Venise, October 2004; AFFI 2005, Paris, June 2005; EFA 2005, Moscow, August 2005; EFA 2006, Zurich, August 2006; ESEM 2006, Vienna, August 2006; EFA 2007, Slovenia, August 2007; ESEM 2007, Budapest, August

2007 ; EFA 2008, Athens, August 2008 ; ESEM 2008, Milan, August 2008 ; SoFiE conference, Geneva, June 2009 ; EFA 2009, Bergen, August 2009 ; ESEM 2009, Barcelona, August 2009; 3rd Financial Risks International Forum, Paris, March 2010 ; 4th Financial Risks International Forum, Paris, March 2011 ; SoFiE 2011, Chicago, June 2011; ESEM 2011, Oslo, August 2011; 5th Financial Risks International Forum, Paris, March 2012 ; SoFiE 2012, Oxford, June 2012 ; EFA, Copenhagen, August 2012 ; ESEM 2012, Malaga, August 2012 ; 6th Financial Risks International Forum, Paris, March 2013; SoFiE 2013, Singapore, June 2013 ; Workshop on Financial Markets and Nonlinear Dynamics, Paris, June 2013 ; EFA, Cambridge, August 2013 ; ESEM 2013, Goteborg, August 2013 ; 7th Financial Risks International Forum, Paris, March 2014; IEEE CIFEr 2014, London, March 2014 ; AFFI 2014, Aix en Provence, May 2014 ; SoFiE 2014, Toronto, June 2014; EFA, Lugano, August 2014 (track chair); BdF-ACPR-SoFiE conference Paris, July 2014; ESEM 2014, Toulouse, August 2014; 8th Financial Risks International Forum, Paris, March 2015 ; SGF conference, Zurich, April 2015; SoFiE 2015, Aarhus, June 2015 ; EFA, Vienna, August 2015; FMA International, Orlando, October 2015 ; IEEE CIFEr 2015, Cape Town, December 2015 ; 9th Financial Risks International Forum, Paris, March 2016 ; AFFI 2016, Liège, May 2016 ; FERM 2016, Guangzhou, June 2016 ; SoFiE 2016, Hong-Kong, June 2016; EFMA 2016, Basel, July 2016; ESEM 2016, Geneva, August 2016 ; FMA International, Las Vegas, October 2016 ; IEEE CIFEr 2016, Athens, December 2016 ; SGF conference 2017, Zurich, March 2017 ; SNDE symposium, Paris, March 2017; 10th Financial Risks International Forum, Paris, March 2017; SoFiE 2017, New-York, June 2017 ; ESEM 2017, Lisbon, August 2017 ; FMA International, Boston, October 2017; Workshop (ISC Paris and ESC La Rochelle) Alternative Finance, November 2017 ; IEEE CIFEr 2017, Hawaii, December 2017 ; AFFI meeting, Paris, December 2017; 11th Financial Risks International Forum, Paris, March 2018; AFFI meeting, Paris, June 2018; FERM 2018, Shanghai, June 2018 ; SoFiE 2018, Lugano, June 2018 ; IEEE CIFEr 2019, Bangalore, December 2018 ; AFFI meeting, Paris, December 2018 ; SGF conference 2019, Zurich, March 2019; 12th Financial Risks International Forum, Paris, March 2019 ; SoFiE 2019, Shanghai, June 2019.

 Member of the International Scientific Council of the Solvay Brussels School of Economics and Management (Université Libre de Bruxelles, 2012-2014), of the International Advisory board of CERGAM (Université d'Aix-Marseille, 2012-2013), and of the Scientific Council of the Master Econométrie et Statistique Appliquée (Université d'Orléans, 2016-).

## Participation to Research Contracts and Grants:

Modelling of interest rate for Fractales SA (ALM Software for life insurance companies). FSR doctoral grant (UCL) : David Veredas (1999-2001) FSR postdoctoral grant (UCL) : Marc Henry (1999-2001) ARC project (UCL) : (1993-1998), (1999-2004) PAI project (CORE-IRES-ULB-KUL) : (1996-2001) Crédit à chercheur (FNRS) : (2000-2001) Subproject 10 in NCCR Finrisk (2002-2013) Projet de recherche (FNS-SNF) 100018\_149307: « Empirical pricing of American derivative assets » (2014-2017). Bourse Inquire Europe « Time-varying risk premia in Large International Equity Markets » (2017).

Projet de recherche (FNS-SNF) 100018\_182582: « A two-pass penalised crosssectional regression framework for conditional non-linear factor models in large equity and equity derivative data sets » (2018-2021).

Bourse de la fondation Banque de France « Backtesting systemic risk measures » (2018).

### Interviews:

Journal Télévisé de la RTBF (07/06/1998, 02/02/1999), L'Echo (04/06/99), Midi Première sur Radio Une (25/06/99), RTS La 1<sup>ère</sup> émission CQFD High frequency trading (2/10/2012), Swissquote Magazine (January 2013), Le Temps (11/01/2013).

### Newspapers:

- « Y a-t-il un avenir pour les money market funds en Europe ? » with O. Renault, Agefi (19/01/2002).

- « Bale II : les points de vue du milieu académique», Agefi (25/04/2002).

- « Enjeux du Risk Management», Agefi (15/07/2002).

- « La Conférence European Investment Review à Genève les 25 et 26 septembre!», Agefi (27/08/2003).

- « The prescient are few!», New York Times (13/07/2008).

- « Performants, les fonds mutuels? », La Libre Entreprise (13/06/09).

- « Une question de compétence ou de chance? », avec Gilles Criton, Denaris (Janvier 2012).

- « Les nouveaux défis de la gestion alternative », avec Gilles Criton, Le Temps (01/02/2012).

## Expertise:

Expert in an ICC arbitration case (Arbitral Tribunal in Bern): litigation on valuation of a stock ownership