

Professional Experience

2013-Present Partner, AlphaCrest Capital Management
 2012-Present Visiting Professor of Finance, UCLA Anderson School of Management
 2008-Present Senior Research Associate, Department of Economics, University of Zurich
 1999-2008 Managing Director, Head of Statistical Arbitrage, Proprietary Trading, Credit Suisse, London
 1995-1998 Associate Professor of Finance (Tenure-track), UCLA Anderson School of Management
 1987-1988 Second Lieutenant, 24th Marine Corps, Perpignan, France

Education

1991-1995 Finance Ph.D., Sloan School of Management, Massachusetts Institute of Technology, Cambridge
 Advisor: Andrew Lo; Tenure-track job offers upon graduation: Chicago, Wharton, Yale, UCLA
 1990-1991 M.Sc. in Statistics and Economics, Ecole N^{ale} de la Statistique et de l'Administration Economique
 1988-1990 B.Sc., Ecole Polytechnique, Paris; Obtained 3rd-highest grade nationwide at entrance exam
 1985-1987 Undergraduate-level preparation to enter engineering schools, Maths major, Louis-le-Grand, Paris

Awards

2011 Biography listed in Who's Who in the World
 1999 Annual Prize awarded by the UK Institute for Quantitative Investment Research
 1997 Roger F. Murray Prize from the "Q Group" (quantitative U.S. money managers)

Interests

Probability, Statistics, Economics, Finance; large covariance matrix estimation; statistical arbitrage

Selected Publications

2018 "Large dynamic covariance matrices" with Robert F. Engle and Michael Wolf, *Journal of Business & Economic Statistics*, forthcoming
 2017 "Nonlinear shrinkage of the covariance matrix for portfolio selection: Markowitz meets Goldilocks" with Michael Wolf, *Review of Financial Studies*, 30(12):4349-4388
 2012 "Nonlinear shrinkage estimation of large-dimensional covariance matrices" with Michael Wolf, *Annals of Statistics*, 40(1-2):1024-1060
 2011 "Eigenvectors of some large sample covariance matrix ensembles" with Sandrine Péché, *Probability Theory and Related Fields*, 150(2):233-264
 2004 "A well-conditioned estimator for large-dimensional covariance matrices" with Michael Wolf, *Journal of Multivariate Analysis*, 88(2):365-411 [cited by more than 1,400 subsequent academic articles]
 2001 "Gain, loss, and asset pricing" with Antonio E. Bernardo, *Journal of Political Economy*, 108(1):144-172
 2000 "Crashes as critical points" with Anders Johansen and Didier Sornette, *International Journal of Theoretical and Applied Finance*, 03(02):219-255
 1996 "Robust structure without predictability: The 'compass rose' pattern of the stock market" with Timothy Falcon Crack, *Journal of Finance*, 51(2): 751-762

Selected Seminar and Conference Presentations

2018 Institute of Mathematical Statistics-Asia Pacific Rim Meeting (IMS-APRM), Singapore
 2016 Finance Seminar, UCLA Anderson School of Management
 2014 2nd Conference of the International Society of NonParametric Statistics (INSPS), Cádiz, Spain,
 2011 Opening Speaker, Conference on *Asset and Risk Management in the Aftermath of the Financial Crisis*, celebrating the centennial of HEC (Hautes Etudes Commerciales) Lausanne

Recent Referee Reports

Annals of Statistics, Biometrika, Econometrica, Journal of Banking & Finance, Journal of Financial Econometrics, Journal of Multivariate Analysis, Review of Financial Studies, Journal of the Royal Statistical Society B, Journal of Multivariate Analysis, Journal of Empirical Finance, European Journal of Finance, IEEE Transactions on Signal Processing, Operations Research, Review of Financial Studies, SIAM Journal on Financial Mathematics, Statistics & Probability Letters

Committee Service

2009-2013 Recruiting Committee, Finance Department, HEC (Hautes Etudes Commerciales) Lausanne
 2008-2013 Steering Committee, Master in Financial Engineering, Ecole Polytechnique Fédérale de Lausanne
 2005-2008 New Managing Directors Promotion Committee (Europe), Credit Suisse First Boston