Michael Johannes

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University education

- Ph.D., M.A., Department of Economics, University of Chicago, 2000.
- B.S. Marquette University, summa cum laude, *Phi Beta Kappa*, 1995.

Academic Appointments

- 2007-present, Associate Professor of Finance (with tenure), Graduate School of Business, Columbia University.
- 2005 to 2007, Roger F. Murray Associate Professor of Finance, Graduate School of Business, Columbia University.
- Spring 2006, Visiting Scholar, Graduate School of Business, Stanford University.
- Fall 2005, Visiting Associate Professor of Finance, Kellogg Graduate School of Management, Northwestern University.
- 2004 to 2005, Associate Professor, Graduate School of Business, Columbia University.
- 2000 to 2004, Assistant Professor, Graduate School of Business, Columbia University.

Teaching

- "Capital Markets," MBA (Spring 2001-2005, 2007, 2010) and Executive MBA (Fall 2010, 2011), Graduate School of Business, Columbia University.
- "Complete Course in Professional Risk Management," Executive education (Winter 2007, 2008, 2009, 2010, 2011), Graduate School of Business, Columbia University.
- "Models and Methods of Continuous-Time Finance," Ph.D, (Fall 2001, 2002, 2003, 2004, Spring 2007, 2008), Graduate School of Business, Columbia University.
- "Computational methods for Bayesian inference," Ph.D, (Fall 2007, 2009, 2010, 2011), Graduate School of Business, Columbia University.
- "Derivatives I," MBA (Fall 2005), Kellogg Graduate School of Management, Northwestern University.
- "Short Course on Financial Markets," Masters level, (Fall 2010), Woodrow Wilson School of Public Policy, Princeton University.

Publications

Journal articles

• The Impact of Jumps in Equity Index Volatility and Returns (with Bjorn Eraker and Nicholas Polson), 2003, *Journal of Finance* 58, 1269-1300.

- The Economic and Statistical Role of Jumps to Interest Rates, 2004, *Journal of Finance* 59, 227-260. Nominated for the Smith-Breeden prize.
- Pricing Collateralized Swaps (with Suresh Sundaresan), 2007, Journal of Finance 62, 383-410.
- Model Specification and Risk Premia: Evidence from S&P 500 futures options market (with Mark Broadie and Mike Chernov), 2007, *Journal of Finance* 62, 1453-1490.
- MCMC MLE (with Eric Jacquier and Nick Polson), 2007, Journal of Econometrics 137 615-640
- Optimal Filtering of Jump-Diffusions: Extracting Latent States from Asset Prices (with Nicholas Polson and Jon Stroud), 2009, *Review of Financial Studies* 22: 2759 2799.
- Understanding expected option returns (with Mark Broadie and Mike Chernov), 2009, *Review of Financial Studies* 22, 4493 4529.
- Particle Learning and Smoothing, 2010, with Carlos Carvalho, Hedibert Lopes and Nick Polson, *Statistical Science*, 25, 88-106.
- Particle learning: Simulation-based Bayesian inference, *Bayesian Statistics 9*, 2010, (with Carlos Carvalho, Hedibert Lopes, and Nicholas Polson), forthcoming.

Book

• <u>Computational Methods for Bayesian Inference: MCMC methods and Particle Filtering</u>, with Nicholas Polson, accepted for publication in the Princeton Series in Finance (subject to editorial review), Spring 2011, Princeton University Press.

Book chapters

- MCMC methods for Financial Econometrics (with Nick Polson), in *Handbook of Financial Econometrics*, edited by Y. Aït-Sahalia and L.P. Hansen, 2009, Volume 2, 1-72, North Holland.
- MCMC methods for financial time series, (with Nick Polson), in *Handbook of Financial Time Series*, Springer Verlag, edited by Torben G. Andersen, Richard A. Davis, Jens-Peter Kreiss, and Thomas Mikosch, 2009, 1001-1014, Springer-Verlag.
- Particle filtering, (with Nick Polson), *Handbook of Financial Time Series*, Springer Verlag, edited by Torben G. Andersen, Richard A. Davis, Jens-Peter Kreiss, and Thomas Mikosch, 2009, 1015-1031, Springer-Verlag.
- Bayesian computation in finance, (with Hore, Lopes, McCulloch and Polson) in *Frontiers of Statistical Decision Making and Bayesian Analysis*, edited by Chen, M.-H., Dey, D., Mueller, P., Sun, D. and Ye, K., 2010, 383-396.

Invited Comment

- Comment on Pastorello, Patilea and Renault, 'Iterative and Recursive Estimation in Structural Nonadaptive Models,' with Nick Polson, *Journal of Business & Economic Statistics* 21, 449-509.
- Comment on Doucet et al. "Particle MCMC" (with Nick Polson and Seung Yae), 2010, *Journal of Royal Statistical Society, Series B*, 72, 324-326.

Working papers

- Optimal portfolio allocation and sequential predictive regressions, 2011, with Nick Polson and Arthur Korteweg.
- MCMC methods for Expected Utility Calculations, with Nick Polson and Eric Jacquier.
- Learning about Consumption Dynamics, 2010, with Lars Lochstoer and Ethan Mou.

- The Asset Pricing Implications of Priced Structural Parameter Uncertainty, 2010, with Pierre Collin-Dufresne and Lars Lochstoer.
- Shocks to asset pricing factors: understanding the risks and realized returns of common asset pricing factors, 2008, with Sam Cheung, Arthur Korteweg, and Nicholas Polson.
- Earnings announcements and option prices, 2006, with Andrew Dubinsky.
- Robust state filtering and parameter learning, 2007, with Nick Polson and Seung Yae.
- Exact state filtering parameter learning with particle methods, 2007, with Nick Polson.

Conference presentations

- 1999: Econometric Society Meetings, Fall NBER Asset Pricing Group (Discussant)
- 2000: 7th Annual Conferenc on Derivatives Securities and Risk, Center for Applied Probability of Columbia University, Econometric Society (summer meetings).
- 2001: AFA (discussant), WFA, Princeton Conference on Financial Econometrics, 14th Australiasia Finance Conference (Keynote speaker).
- 2002: WFA, Summer NBER Asset Pricing Group, "Event Risk" conference Mathematical Science Research Institute.
- 2003: Econometric Society Meetings (Discussant), Cirano Conference on Monte Carlo Methods; Cirano Conference on Financial Econometrics, WFA.
- 2004: AFA (discussant), WFA (discussant).
- 2005: WFA
- 2006: AFA (discussant), Winter Econometric Society Meetings (discussant), Bank of Canada Fixed Income Conference (discussant), Cirano/Cireq Financial Econometrics Conference (discussant), Summer NBER Asset Pricing Group.
- 2007: Cirano/Cireq Financial Econometrics Conference (discussant), GAIM 2007 Hedge Fund Conference (presenter, panelist), North American Summer Econometric Society Meetings.
- 2008: AFA (discussant, 2 papers), London Oxford Financial Econometrics Conference, SBIES (Bayesian Inference in Econometrics and Statistics) Conference (Chicago), Conference on Financial Innovation: 35 Years of Black/Scholes and Merton (Vanderbilt).
- 2009: AFA (discussant), Cirano/Cireq Financial Econometrics Conference (discussant and presenter), Second Annual SoFiE Conference (Geneva).
- 2010: European Finance Association (discussant)

Invited seminars

- 1999: Duke University (Fuqua), Chicago (GSB).
- 2000: Northwestern University (Kellogg), Columbia University (GSB), Cirano/University of Montreal, Federal Reserve Board of Governors.
- 2001: NYU (Stern).
- 2002: Lehman Brothers Fixed Income Research, London Business School, London School of Economics (Financial Markets Group).
- 2003: Carnegie Mellon (GSIA), Morgan Stanley Fixed Income Research, University of Texas at Austin (McCombs), Stanford University (GSB), University of California-Berkeley (GSB), Northwestern University (Kellogg).
- 2004: University of Southern California, University of Illinois Champagne/Urbana, Citigroup Fixed Income Research, Caspian Capital Management.

- 2005: Northwestern University (Kellogg), Washington University in St. Louis (GSB), MIT (Sloan), University of Pennsylvania (Economics), GSAM (Goldman, Sachs Asset Management).
- 2006: Columbia University (GSB), Stanford University (GSB), University of Minnesota.
- 2007: Yale University, GSAM.
- 2008: University of Illinois Champagne/Urbana, University of Chicago (GSB), Harvard University (Economics), Oxford University, Desautels Faculty of Management McGill University.
- 2009: Rice University, University of Texas-Austin, Society of Quantitative Analysts.
- 2010: Federal Reserve (Board of Governors), University of Wisconsin-Madison.
- 2011: Stanford University (GSB), SIFR (Institute for Financial Research in Stockholm).

Ph.D. Students with significant advisory role

- Andrew Chen (2002).
- Kodjo Apedjinou (Lehman Brothers).
- Andrew Dubinsky (Chair, 2007, Goldman, Sachs).
- Philippe Mueller (first appointment: LSE)
- Sam Cheung (Deutsche Bank)
- Andreas Stathopoulos (USC)
- Yael Eisenthal (Goldman, Sachs).
- Ethan Mou, Damla Gunes, and Miguel Morin (ongoing).

Awards and Honors

- Chazen Fellowship, 2001.
- Nominated for the Smith-Breeden best-paper prize, *Journal of Finance*, 2004, The Economic and Statistical Role of Jumps to Interest Rates.
- Pricing Collateralized Swaps (with Suresh Sundaresan), 2007, *Journal of Finance*, was awarded the "Best Academic Paper of the Year Award" at GAIM (Global Alternative Investment Managers) annual conference, 2007.
- External grant for fixed income and derivatives research (\$150,000, anonymous hedge fund).

Profession service and refereeing

- Referee for the following journals: Journal of Finance, Review of Financial Studies, Econometrica, Journal of the American Statistical Association, Journal of Business and Economic Statistics, Journal of Computational Finance, Journal of Empirical Finance, Journal of Financial and Quantitative Analysis, Journal of Financial Econometrics, Review of Economics and Statistics, Management Science, Journal of Political Economy, Journal of Economics and Dynamic Control, Journal of Econometrics, Journal of Financial Econometrics, Social Sciences and Humanities Research Council of Canada, and The National Science Foundation.
- Associate Editor: Journal of Financial Econometrics (2007-), Management Science (2007-), and Journal of Business and Economic Statistics (2009-)
- Program Committee, Western Finance Association Meeting (2007, 2008, 2009, 2010, 2011).
- Program Committee, American Finance Association (2009, 2010).

School and University service

- Finance recruiting committee: 2001-2002, 2002-2003, 2003-2004, 2007-2008.
- Finance curriculum committee, chair, 2010-.
- MBA Conduct committee: 2003-2004.
- Organized MBA Symposium, December 2002, "Alternative Perspectives on Wall Street."
- Student-Faculty Academic Affairs Committee, 2002-2004.
- Finance seminar organizer: 2001-2002, 2004-2005.
- University Senate: 2004-2006.
- University Ad-hoc tenure review committee, 2008.

Compensated external engagements

- Caspian Capital Management
- PriceWaterhouseCoopers (PWC)
- Markit