

# Michael Johannes

---

Graduate School of Business  
Columbia University  
3022 Broadway, Uris Hall #424  
New York, New York 10025

Mail: [mj335@columbia.edu](mailto:mj335@columbia.edu)  
Phone: (212)-854-0110  
Fax: (212)-316-9180

## University Education

- Ph.D., M.A., Department of Economics, University of Chicago, 2000 (Ph.D. thesis committee: John Cochrane, Lars Hansen (chair), and Jose Scheinkman).
- B.S. Marquette University, summa cum laude, *Phi Beta Kappa*, 1995.

## Academic Appointments

- 2017-present, Ann F. Kaplan Professor of Business, Graduate School of Business, Columbia University.
- 2012-2017, Professor of Finance, Graduate School of Business, Columbia University.
- 2012-present, member and committee member of the Center for Financial and Business Analytics for the Data Science Institute, The Fu Foundation School of Engineering and Applied Science, Columbia University.
- 2007 to 2011, 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

- Columbia University, Graduate School of Business:
  - *Capital Markets*, MBA (2001-2005, 2007, 2010, 2018), Executive MBA (2010, 2011, 2013), and Global Executive MBA (2012-2019).
  - *Models and Methods of Continuous-Time Finance*, Ph.D., (2001-2004, 2007-2008).
  - *Introduction to Continuous-Time Finance*, Ph.D.
  - *Computational methods for Bayesian inference*, Ph.D., (Fall 2007, 2009-2012).
  - Executive education: *Complete Course in Professional Risk Management* (2007-2012), Eruditus Executive Program in Management (2015-2018), Deutsche Bank Associates Program (2016-2018), AMP Program (2016-2018).
- Northwestern University, Kellogg Graduate School of Management: *Derivatives I*, MBA (Fall 2005).

- Princeton University, Woodrow Wilson School of Public Policy: *A Short Course on Financial Markets: Mortgage and Derivative Markets* (2010-2018) and *Treasury and Credit Markets* (2018).

## **Publications**

### **Journal Articles**

1. The Impact of Jumps in Equity Index Volatility and Returns (with Bjorn Eraker and Nicholas Polson), 2003, *Journal of Finance* 58, 1269-1300.
2. The Economic and Statistical Role of Jumps to Interest Rates, 2004, *Journal of Finance* 59, 227-260. Nominated for the Smith-Breeden prize.
3. Pricing Collateralized Swaps (with Suresh Sundaresan), 2007, *Journal of Finance* 62, 383-410.
4. 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.
5. MCMC MLE (with Eric Jacquier and Nick Polson), 2007, *Journal of Econometrics* 137 615-640.
6. 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.
7. Understanding Expected Option Returns (with Mark Broadie and Mike Chernov), 2009, *Review of Financial Studies* 22, 4493 – 4529.
8. Particle Learning and Smoothing, 2010, with Carlos Carvalho, Hedibert Lopes and Nick Polson, *Statistical Science*, 25, 88-106.
9. Particle learning: Simulation-based Bayesian inference, *Bayesian Statistics* 9, 2011, (with Carlos Carvalho, Hedibert Lopes, and Nicholas Polson), 317-360.
10. Sequential Learning, Predictability, and Optimal Portfolio Returns, 2014, with Nick Polson and Arthur Korteweg, *Journal of Finance* 69, 611-644.
11. Bayesian modeling and forecasting of 24 hours high frequency volatility, 2014, with Jon Stroud, *Journal of the American Statistical Association* 109, 1368-1384.
12. Parameter learning in General Equilibrium: The Asset Pricing Implications, 2016, with Pierre Collin-Dufresne and Lars Lochstoer, *American Economic Review*, 106 (3), 664-698.
13. Learning about Consumption Dynamics, 2016, with Lars Lochstoer and Ethan Mou, forthcoming, *Journal of Finance*, 71, 551-600.
14. Asset pricing when “This Time is Different,” 2017, with Pierre Collin-Dufresne and Lars Lochstoer, *Review of Financial Studies*, 30, 505-538.
15. Option pricing of Earnings Announcement Risk, 2019, with Andrew Dubinsky, Andreas Kaeck, and Norman Seeger, 32, 646-687, *Review of Financial Studies*.

### **Book manuscript**

- *Computational Methods for Bayesian Inference: MCMC methods and Particle Filtering*, with Nicholas Polson.

### **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 Comments**

- 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 and Work in Progress**

- MCMC methods for Expected Utility Calculations, 2011, with Nick Polson and Eric Jacquier.
- Robust state filtering and parameter learning, 2009, with Nick Polson and Seung Yae.
- Exact state filtering parameter learning with particle methods, 2009, with Nick Polson.
- 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 announcement risk and earnings surprises, 2018, with Andreas Kaeck and Norman Seeger.
- Option based information about post earnings announcement drift, with Andreas Kaeck and Norman Seeger, 2018.

### **Conference and Seminar Presentations**

- Research seminars:
  - Brigham Young University (2014)
  - Carnegie Mellon (GSIA, 2003)
  - Caspian Capital Management (2004)
  - Chicago Quantitative Alliance (2012)
  - Citigroup Fixed Income Research (2004)
  - Columbia (Economics, 2013)
  - Columbia University (GSB, 2000, numerous as faculty member)
  - Duke University (Fuqua, 1999)

- EPFL/University of Lausanne (2013)
  - Federal Reserve Board of Governors (2000)
  - Federal Reserve Bank of New York (2006, 2009, 2018)
  - Federal Reserve (San Francisco, 2013)
  - Goldman, Sachs Asset Management (2005, 2007)
  - Harvard University (Economics, 2008)
  - Institute for Financial Research in Stockholm (2011)
  - Northwestern University (Kellogg, 2000, 2003, 2005)
  - Lehman Brothers Fixed Income Research (2002)
  - London Business School (2002)
  - London School of Economics (2002)
  - McGill University (2008)
  - MIT (Sloan, 2005)
  - Morgan Stanley Fixed Income Research (2003)
  - NYU (Stern, 2001)
  - Oxford University (GSB, 2008)
  - Rice University (2009)
  - Stanford University (GSB, 2003, 2006, 2011)
  - UCLA (Anderson School, 2013)
  - University of Amsterdam/Duisenberg School of Finance/Tinbergen Institute (2012)
  - University of California-Berkeley (GSB, 2003)
  - University of Chicago (GSB, 1999, 2008)
  - University of Houston (2015)
  - University of Illinois Champagne/Urbana (2004, 2008)
  - University of Minnesota (GSB, 2006)
  - University of Montreal (2000)
  - University of Pennsylvania (Economics, 2005)
  - University of Southern California (2004)
  - University of Texas at Austin (McCombs, 2003, 2009)
  - University of Wisconsin (2011)
  - Washington University in St. Louis (GSB, 2005)
  - Yale University (SOM, 2007)
- Conference presentations/discussions:
    - 14<sup>th</sup> Australasia Finance Conference (Keynote speaker, 2001)
    - American Finance Association (2008 (2), discussant, 2001, 2004, 2006, 2008, 2009)
    - Bank of Canada Fixed Income Conference (discussant, 2006)
    - Cirano Conference on Financial Econometrics (2000, 2003, 2009, discussant 2006, 2007)
    - Cirano Conference on Monte Carlo Methods (2003)
    - Columbia Financial Engineering Workshop on Market Liquidity (2008),

- Conference on Derivatives Securities and Risk, Center for Applied Probability of Columbia University (2000)
- Conference on Financial Innovation: 35 Years of Black/Scholes and Merton (2008),
- Econometric Society Meetings (1999, 2000, 2007; discussant 2003, 2006)
- European Finance Association (2013 discussant, 2010, 2013)
- “Event Risk” Conference Mathematical Science Research Institute (2002)
- GAIM 2007 Hedge Fund Conference (presenter, panelist)
- IFSID & Bank of Canada Conference on Derivatives (Keynote Address, 2013)
- International Association of Financial Engineers Liquidity Buffers Conference (2007)
- London Oxford Financial Econometrics Conference (2008)
- Managed Futures Association (2013, panelist)
- NBER Asset Pricing Group (2002, 2006; discussant in 1999)
- NBER Commodities Group (discussant, 2015)
- Princeton Conference on Financial Econometrics (2001)
- SBIES (Bayesian Inference in Econometrics and Statistics) Conference (2008)
- SoFiE Conference (2009)
- Society of Quantitative Analysts (2009)
- Western Finance Association (2001, 2002, 2003, 2005; Discussant, 2004)

#### **Ph.D. Students With Significant Advisory Role**

- Andrew Chen.
- Kodjo Apedjinou (First placement, Lehman Brothers).
- Andrew Dubinsky (Goldman, Sachs).
- Philippe Mueller (LSE)
- Sam Cheung (Deutsche Bank)
- Andreas Stathopoulos (USC)
- Yael Eisenthal (Goldman, Sachs Asset Management)
- Ethan Mou (Merrill Lynch)
- Damla Gunes (Morgan Stanley)
- Ravi Sastry (SMU)
- Alexey Semenov (industry).
- Miguel Morin (Cambridge University).
- Kerem Tuzcuoglu (Bank of Canada)

#### **Awards and Honors**

- EMBA-Global Americas & Europe Class of 2013 Commitment to Excellence award.
- 2011 Columbia Business School Dean’s Award for Teaching Excellence (in an elective course).
- Nominated for the Smith-Breeden best-paper prize, *Journal of Finance*, 2004.

- 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).
- Chazen Fellowship, 2001.
- Center for International Business Education research grant, 2001.

### **Profession service and refereeing**

- Referee for the following journals: *Computational Statistics and Data Analysis*, *Econometrica*, *Finance and Stochastics*, *Financial Analysts Journal*, *Finance Research Letters*, *Journal of Business and Economic Statistics*, *Journal of Computational Finance*, *Journal of Economic Dynamics and Control*, *Journal of Empirical Finance*, *Journal of Finance*, *Journal of Financial and Quantitative Analysis*, *Journal of Financial Econometrics*, *Journal of Financial Economics*, *Journal of Political Economy*, *Journal of Econometrics*, *Journal of Economic Theory*, *Journal of Monetary Economics*, *Journal of the American Statistical Association*, *Journal of the Royal Statistical Association, Series B*, *Management Science*, *Review of Asset Pricing Studies*, *Review of Economic Studies*, *Review of Economics and Statistics*, *Review of Financial Studies*, *Quantitative Finance*, *The Quarterly Journal of Economics*, Social Sciences and Humanities Research Council of Canada, and The National Science Foundation.
- Associate Editor: *Journal of Econometrics* (2016-), *Journal of Financial Econometrics* (2007-2012), *Management Science* (2007-2014), *Journal of Business and Economic Statistics* (2009-2013).
- Program Committees: Western Finance Association Meeting (2007-2013), American Finance Association (2009, 2010), European Finance Association (2013).
- Member, Research Subcommittee of PRMIA, the Professional Risk Managers International Association, 2011-2103.

### **School and University service**

- Masters in Financial Economics, Program Director, 2011-.
- Faculty Governance Review Committee, Chair, 2017-2018.
- Finance Division Recruiting committee: 2001-2002, 2002-2003, 2003-2004, 2007-2008.
- Finance curriculum committee, Chair, 2010-2011.
- Finance seminar organizer: 2001-2002, 2004-2005.
- Capital Markets Course Coordinator: 2011- 2014
- Member, Financial Analytics Committee, Institute for Data Sciences and Engineering, Fu Foundation School of Engineering, Columbia University: 2012-.
- MBA Conduct committee: 2003-2004.
- MBA Symposium, 2002, “Alternative Perspectives on Wall Street,” organizer.
- Student-Faculty Academic Affairs Committee, 2002-2004.
- University Senate: 2004-2006.
- University Ad-hoc tenure review committee, 2008.

**Outside activities over the past 10 years (Disclosed in accordance with Columbia Business School policies)**

- Consultant to Caspian Capital Management, Markit, O'Brien International, Clarke Capital Management, OBIG, and PriceWaterhouseCoopers.
- Consulting and expert witness litigation support: Cleary, Gottlieb, Steen & Hamilton, Susman, Godfrey, Cornerstone, and Lexecon.
- CLSA (speaking engagement).
- Member, Standard and Poor's Academic Advisory Council, 2013.