Guillaume Roussellet

Main Affiliation

McGill University - Desautels
Bronfman Building - Room 555
1001 W. Sherbrooke St.
Montreal, QC H3A 1G5, Canada

Contact

Mail: guillaume.roussellet@mcgill.ca
Webpage: https://guillaumeroussellet.quarto.pub/

Canadian Permanent Resident

Research Interests

Yield curve modeling, asset and derivative pricing, financial econometrics, non-linear filtering and factor models, machine learning, monetary policy and macrofinance, inflation risk premia.

Appointment

Aug. 2017 - **McGill University, Desautels Faculty of Management**, Montréal, Canada

- *Assistant Professor*

Academic Positions

2015 - 2017 **NYU Stern School of Business - Volatility Institute**, New York, U.S.

- *Post-doctoral researcher*

Job Market Committee: Robert F. Engle (supervisor), Alain Monfort, Olivier Scaillet, Andrew Patton.

Education

Spring 2015 **NYU Stern School of Business - Economics department**, New York, U.S.

- *Visiting Scholar*

Sponsor - David Backus

2012 - 2015 **University Paris-Dauphine, CREST, and Banque de France**, Paris, France

- *Ph.D. in Applied Mathematics (Econometrics)*

Dissertation: *Non-Negativity and Zero Lower Bound in Affine Yield Curve Models*
Committee: Alain Monfort (supervisor), Christian Gouriéroux, Éric Renault, Olivier Scaillet, Nour Meddahi, Serge Darolles.

2011 - 2012 **Paris School of Economics**, Paris, France

- *M.Sc in Economics*

2009 - 2012 **ENSAE - Paristech**, Malakoff, France

- *B.Sc, M.Sc in Economics, Statistics and Econometrics*

2007 - 2009 **Lycée Lakanal**, Sceaux, France

- *Classes Préparatoires - Humanities and Social Sciences (B/L)*

Professional and Research Experience

Summer 2012 **Banque de France**, Paris, France

- *Intern in yield curve modeling*

Summer 2011 **CEPII research center**, Paris, France

- *Research assistant: Assessing Fiscal Sustainability in the Presence of Systemic Banks*

Summer 2010 **French Treasury Department, Ministry of Finance**, Paris, France

- *Intern in forecasting aggregate dividends in national accounts*

Published Works

⊛ The Term Structure of Macroeconomic Risks at the Effective Lower Bound, 2023, *Journal of Econometrics (forthcoming)* (single-authored)

⊛ Affine Modeling of Credit Risk, Credit Event and Contagion (with Alain Monfort, Fulvio Pegoraro and Jean-Paul Renne),
▷ *Management Science - Volume 67, Issue 6, June 2021, Pages 3674-3693.*

⊛ Staying at Zero with Affine Processes: An Application to Term Structure Modeling (with Alain Monfort, Fulvio Pegoraro and Jean-Paul Renne),
▷ *Journal of Econometrics - Volume 201, Issue 2, December 2017, Pages 348-366.*

⊛ Scenario Generation For Long-Run Interest Rate Risk Assessment (with Robert Engle and Emil Siriwardane)
▷ *Journal of Econometrics - Volume 201, Issue 2, December 2017, Pages 333-347.*

⊛ A Quadratic Kalman Filter *[code]* (with Alain Monfort and Jean-Paul Renne),
▷ *Journal of Econometrics - Volume 187, Issue 1, July 2015, Pages 43–56.*

⊛ Credit and Liquidity in Interbank Rates: A Quadratic Approach (with Simon Dubecq, Alain Monfort and Jean-Paul Renne),
▷ *Journal of Banking and Finance - Volume 68, July 2016, Pages 29-46.*

⊛ Fiscal Sustainability in the Presence of Systemic Banks: The Case of EU Countries (with Agnès Bénassy-Quéré),
▷ *International Tax and Public Finance - Volume 21, Issue 3, June 2014, Pages 436-467.*

Working Papers

⊛ Default Risk and the Pricing of U.S. Sovereign Bonds, 2022, **R&R Journal of Finance**, (with Robert Dittmar, Alex Hsu and Peter Simasek)

⊛ Identifying Beliefs From Asset Prices, 2020, **R&R Review of Financial Studies**, (with Anisha Ghosh)

⊛ What do Bond Investors Learn from Macroeconomic News?, 2021, (with Jean-Sebastien Fontaine and Bruno Feunou)

⊛ Preventing COVID-19 Fatalities: State versus Federal Policies, 2020, (with Jean-Paul Renne and Gustavo Schwenkler)

Seminar and Conference Presentations

2023 *Conferences* - SFS Cavalcade.

Seminars - Federal Reserve Bank of New York.

2022 *Conferences* - Midwest Finance Association Conference, Quantitative Finance and Financial Econometrics conference (Qffe), Barcelona Graduate School of Economics Ecoometrics workshop, International Applied Econometrics Association Conference, SCE - computing in Economics and Finance, Computational and Financial Econometrics Conference (Cfe)

Seminars - Federal Reserve Bank of San Francisco, CREST.

2021 *Conferences* - Midwest Finance Association Conference, International Applied Econometrics Association Conference, African Meetings of the Econometric Society, North American Meetings of the Econometric Society, European Meetings of the Econometric Society.

2020 *Conferences* - Econometric Society North American Winter meeting.

Seminars - Federal Reserve Bank of Chicago.

2019 *Conferences* - American Finance Association conference, UBC winter finance conference, 6^{th} Safe Conference on Sovereign Bond Markets, SFS Cavalcade North America, Ceu-Essec Workshop in Behavioral Finance, 12^{th} Annual SoFiE Conference, 6^{th} Asset Pricing Workshop at York University, SCE 25^{th} International Conference in Economics and Finance (Cef), NBER Summer meeting for Empirical Methods in Macro, 89^{th} Annual Meeting of the Southern Economic Association, ESSEC-EUROFIDAI finance conference.

Seminars - Deutsche Bundesbank Brownbag.

2018 *Conferences* - 1st Quantitative Finance and Financial Econometrics conference (Qffe), Barcelona Graduate School of Economics Time-Series workshop, 9^{th} TAU finance conference, Annual Northern finance association conference.

Seminars - NYU Stern (Qfe), McGill University Econ seminar, McGill Finance Brownbag

2017 *Conferences* - SCE - computing in Economics and Finance, Computational and Financial Econometrics Conference (Cfe), Bundesbank term structure workshop, FMA annual conference, Northern Finance Association conference.

Seminars - Princeton University, McGill University, University of Montréal, Chicago Booth, New York Federal Reserve, Toulouse School of Economics, Copenhagen Business School, Aarhus University, Warwick Business School, Tilburg University, Erasmus University, European Central Bank.

2016 *Conferences* - 9^{th} Annual Conference of the Society for Financial Econometrics (SoFiE), Barcelona Graduate School of Economics Time-Series workshop, 69^{th} European Summer Meeting of the Econometric Society (Esem), 3^{rd} European Econometric Society Winter Meeting.

Seminars - Bank of Canada, Laval University, NYU Stern (Qfe).

2015 *Conferences* - North American Winter Meeting of the Econometric Society (Nawm), 7^{th} Annual Conference of the Volatility Institute, World Congress of the Econometric Society (Eswc), Banque de France workshop on *Modeling the term structure at the ZLB*, Computational and Financial Econometrics Conference (Cfe).

Seminars - Brown University, Crest, Banque de France.

2014 *Conferences* - 7^{th} International Risk Forum on Big Data, 31^{st} Spring International Conference of the French Finance Association (Affi), 7^{th} Annual Conference of the Society for Financial Econometrics (SoFiE), 20^{th} International Conference on Computing in Economics and Finance (Cef), 1^{st} Conference of the International Association for Applied Econometrics (Iaae), 21^{st} International Conference on Computational Statistics (Compstat), 29^{th} European Summer Meeting of the Econometric Society (Esem).

Seminars - Banque de France Seminar, University of Lugano, Bank of Canada, University of Geneva.

2013 *Conferences* - 6^{th} International Risk Forum on Liquidity Risk, French Association of Economics Conference (Afse), 30^{th} Spring International Conference of the French Finance Association (Affi), European Central Bank Workshop on Non-conventional Monetary Policy, North-American Summer Meeting of the Econometric Society (Nasm), 28^{th} European Summer Meeting of the Econometric Society (Esem), Computational and Financial Econometrics Conference (Cfe).

Seminars - Banque de France.

Discussions in Academic Conferences

2022 Midwest Finance Association

2020 HEC-McGill Winter Conference, 7^{th} University of York asset pricing workshop, Canadian Derivatives Institute conference

2019 ESSEC-EUROFIDAI finance conference.

2018 Northern Finance Association conference, Cireq annual econometrics conference, 9^{th} Tau Finance Conference.

2017 Financial Management Association Annual Conference (Fma), Northern Finance Association (Nfa)

2016 European Finance Association (Efa)

2015 Banque de France Workshop on *Term Structure Modeling and the Zero Lower Bound*

2014 31^{th} Spring International Conference of the French Finance Association (Affi)

2013 30^{th} Spring International Conference of the French Finance Association (Affi)

Referee Activity

Journals: Review of Financial Studies, Journal of Financial Economics, Journal of Econometrics, Management Science, Journal of Business and Economic Statistics, Journal of Financial Econometrics, Journal of Money Credit and Banking, Economics Letters, Journal of Banking and Finance, Journal of Applied Econometrics, Journal of Empirical Finance, Mathematics, European Journal of Finance, International Journal of Forecasting.

Conferences: Essec-Eurofidai winter conference in Paris, Midwest Finance Association Conference, Northern Finance Association Conference, World Symposium on Investment Research.

Grants and Awards

2021	SSHRC Canadian grant
2019	*Fonds de Recherche du Québec - Société et culture* – Research support for new academics
2018	Internal McGill Presentation Grant
2017	Research Institute in Structured Finance and Derivatives Research Grant (Ifsid), McGill Start-up fund
2015	2-year NYU-Stern Volatility Institute Fellowship
2012	3-year Banque de France Fellowship
2012	Crest Fellowship

Teaching

2022 -	Fixed Income Analysis, Ph.D. – McGill University, Desautels School of Management
2020 -	Financial Analytics, Bachelor – McGill University, Desautels School of Management
2017 - 2021	Fixed Income Analysis, Bachelor – McGill University, Desautels School of Management
2013 - 2015	Portfolio Management, Mba – Université Dauphine, Bärchen
2013 - 2015	Financial Econometrics, Graduate (TA) – Ensae-Paristech
2013 - 2015	Time Series Econometrics, Graduate (TA) – Ensae-Paristech
2012 - 2013	Macroeconomics, Undergraduate (TA) – Paris I Sorbonne University

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Languages and Skills

Languages	French (native), English (fluent), German (intermediate), Chinese (notions).
Computer	C++, R, Python (Pandas, Keras, Tensorflow), Scilab, Matlab, Stata, Eviews, SAS, Mathematica, MS Office, LaTeX, Markdown

Personal Interests

Music (25 years of trumpet in Conservatory and orchestra/big band), Swing dancing, History, Classical Literature, Ski, Travel.

Last update: August, 2023