

Gabriel Rodriguez Rondon

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Education

Ph.D. Economics, McGill University 2019 - **Expected 2025**

Comprehensive exams completed:

Macroeconomics, Microeconomics, Econometrics, Monetary Economics

M.A. Economics, McGill University 2018 - 2019

B.A. Economics (Honours), Carleton University 2012 - 2016

Experience

PhD Intern, Bank of Canada June 2023 - September 2023
International Economic Analysis Department

Visiting Student, Boston University January 2023 - May 2023
Economics Department

Data Scientist, Financial Network Analytics August 2019 - January 2023
R&D Team

Research Assistant, McGill University May 2019 - August 2019
for Prof. Jean-Marie Dufour

Research Assistant, Bank of Canada April 2016 - August 2018
Funds Management & Banking Department - Research Team

Data Analyst, Bank of Canada May 2015 - April 2016
Data & Statistics Office - Data Management Team

Data Analyst, Canadian Revenue Agency May 2014 - May 2015
Business Intelligence Division - Compliance Program Team

Working Papers:

1. “Monte Carlo Likelihood Ratio Tests for Markov Switching Models” (with Jean-Marie Dufour), 2023
2. “MSTest: An R-package for Testing Markov-Switching Models” (with Jean-Marie Dufour), 2023

3. “Estimation and inference for stochastic volatility models with leverage and heavy-tailed distributions” (with Jean-Marie Dufour & Md. Nazmul Ahsan), 2023
4. “mbreaks: R Package for Estimating and Testing Multiple Structural Changes in Linear Regression Models” (with Linh Nguyen, Pierre Perron, and Yohei Yamamoto), 2023
5. “Joint Determination of Counterparty and Liquidity Risk in Payment Systems” (with Jorge Cruz Lopez & Charles M. Kahn), 2021 (Awarded **Best Paper on Risk Management** at the NFA 2019 Conference)

Work In Progress

6. “Identification Through Heteroskedasticity Using Multiple Structural Change Tests” (with Pierre Perron), 2023
7. “Testing for the Synchronization of International Business Cycles” (with Jean-Marie Dufour), 2023
8. “Structural Breaks In Underlying Core Inflation”, 2023
9. “Simulation and Stress Testing of Large Value Payment Systems” (with Jorge Cruz Lopez), 2022
10. “Network Model Simulation and Stress Testing of PvP Systems” (with Jorge Cruz Lopez, Carlos Leon, Giuseppe Matera, & Jordan Cambe), 2022

Policy Notes, Technical Notes, & Conference Proceedings:

11. “Simulation-Based Inference for Markov Switching Models” (with Jean-Marie Dufour), In JSM Proceedings, Business and Economic Statistics Section. Washington, D.C.: American Statistical Association, 2022.
12. “The Government of Canada Debt Securities Dataset”, with Jeffrey Gao & Francisco Rivadeneyra, Bank of Canada Technical Report, 2017

Software:

- **MSTest** - R package
- **bootBtest** - R package

Academic Conference & Seminar Presentations

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| Joint Statistical Meetings | 2023 |
| Bank of Canada Brown Bag Seminar | 2023 |
| International Association for Applied Econometrics (IAAE) Annual Conference | 2023 |
| 57th Annual Meetings of the Canadian Economics Association | 2023 |
| Spring 2023 Boston University Econometrics Seminar | 2023 |

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| 16th International Conference on Computational and Financial Econometrics | 2022 |
| Latin American Meetings of The Econometric Society | 2022 |
| Joint Statistical Meetings | 2022 |
| 17th CIREQ Ph.D. Students' Conference | 2022 |
| 56th Annual Meetings of the Canadian Economics Association | 2022 |
| Payments Canada & Bank of Canada Research Symposium | 2017 |
| 51st Annual Meetings of the Canadian Economics Association | 2017 |

Referee Services

International Statistical Review, Journal of Financial Market Infrastructures

Honours, Grants, & Awards

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| Fonds de Recherche du Québec - Société et Culture (FRQSC) | 2021 - 2024 |
| Graduate Excellence Award | 2021 - 2024 |
| McGill Graduate Mobility Award | 2022 - 2023 |
| McGill Graduate Research Enhancement and Travel Awards | 2022 - 2023 |
| STP - SSHRC | 2022 - 2023 |
| Canadian Economics Association Travel Grant | 2022 |
| Dufour Graduate Award | 2020 - 2022 |
| STP - NSERC | 2019 - 2020 |
| STP - SSHRC | 2018 |
| Carleton Academic Scholarship | 2012, 2013 |

Teaching Experience

Teaching Assistant, McGill University:

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| • ECON 610: Microeconomic Theory (Graduate) | Fall 2022 |
| • ECON 620: Macroeconomic Theory (Graduate) | Fall 2022 |
| • ECON 257: Economic Statistics (Honours) | Fall 2020, Winter 2021 |
| • ECON 447: Economics of Information and Uncertainty | Winter 2020 |
| • ECON 319: Economic Crises | Fall 2019 |
| • ECON 219: Current Economic Problems | Winter 2019 |
| • ECON 208: Microeconomic Analysis and Applications | Fall 2018 |

Member of

American Economic Association, American Finance Association, American Statistical Association, Canadian Economics Association, Econometric Society

Programming & Software Proficiency

R, Python, MATLAB, C++, Linux, STATA

Languages

English, French & Spanish.