IVAN A. CANAY

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ACADEMIC POSITIONS

Northwestern University, Department of Economics.

Professor, August 2019 - Present.

Director, WCAS Mathematical Methods in the Social Sciences, 2024 - Present.

HSBC Research Professor, September 2020 - September 2023.

Associate Professor, August 2015 - July 2019. Assistant Professor, August 2008 - July 2015.

EDUCATION

Ph.D. in Economics, University of Wisconsin - Madison. June 2008.
Dissertation Committee: Jack Porter, Bruce Hansen, Kenneth West.
M.S. in Economics, University of Wisconsin - Madison. December 2005.
Graduate Studies, University Torcuato Di Tella (UTDT). May 2003.
Licenciado en Economia, University of Buenos Aires (UBA). June 2001.

RESEARCH Interest Partial Identification, Empirical Likelihood, Uniform Inference, Randomization Tests, Covariate-Adaptive Randomization, Clustered Data.

Published Papers

- 1. Canay, I. A. (2010): "EL Inference for Partially Identified Models: Large Deviations Optimality and Bootstrap Validity," Journal of Econometrics, 156 (2), 408-425.
- 2. Canay, I. A. (2010): "Simultaneous Selection and Weighting of Moments in GMM Using a Trapezoidal Kernel," Journal of Econometrics, 156 (2), 284-303.
- 3. Canay, I. A. (2011): "A Simple Approach to Quantile Regression for Panel Data," The Econometrics Journal, 14 (3), 368-386.
- 4. Bugni, F. A., I. A. Canay, and P. Guggenberger (2012): "Distortions of Asymptotic Confidence Size in Locally Misspecified Moment Inequality Models", Econometrica, 80 (4), 1741-1768.
- 5. Canay, I. A., and T. Otsu (2012): "Hodges-Lehmann Optimality for Testing Moment Conditions", Journal of Econometrics, 171 (1), 45-53.
- 6. Canay, I. A., A. Santos, and A. M. Shaikh (2013): "On the Testability of Identification in Some Nonparametric Models with Endogeneity", Econometrica, 81 (6), 2535-2559.
- 7. Bugni, F. A., I. A. Canay, and X. Shi (2015): "Specification Tests for Partially Identified Models Defined by Moment Inequalities", Journal of Econometrics, 185 (1), 259-282.
- 8. Bugni, F. A., I. A. Canay, and X. Shi (2017): "Inference for Subvectors and Other Functions of Partially Identified Parameters in Moment Inequality Models", Quantitative Economics, 8 (1), 1-38.
- 9. Canay, I. A., J. P. Romano, and A. M. Shaikh (2017): "Randomization Tests Under an Approximate Symmetry Assumption", Econometrica, 85 (3), 1013-1030.
- 10. Canay, I. A. and A. M. Shaikh (2017): "Practical and Theoretical Advances for Inference in Partially Identified Models", In B. Honoré, A. Pakes, M. Piazzesi, & L. Samuelson (Eds.), Advances in Economics and Econometrics: Volume 2: Eleventh World Congress, (Econometric Society Monographs, pp. 271-306). Cambridge University Press.

- 11. Canay, I. A. and V. Kamat (2018): "Approximate Permutation Tests and Induced Order Statistics in the Regression Discontinuity Design", The Review of Economic Studies, 85 (3), 1577-1608.
- 12. Bugni, F. A., I. A. Canay, and A. M. Shaikh (2018): "Inference under Covariate-Adaptive Randomization", Journal of the American Statistical Association, 113 (524), 1784-1796.
- 13. Bugni, F. A., I. A. Canay, and A. M. Shaikh (2019): "Inference under Covariate-Adaptive Randomization with Multiple Treatments", Quantitative Economics, 10 (4), 1747-1785.
- 14. Bugni, F. A. and I. A. Canay (2021): "Testing Continuity of a Density via g-order statistics in the Regression Discontinuity Design", Journal of Econometrics, 221 (1), 138-159. Winner of the 2022 Arnold Zellner Award for best theory paper published in 2020-2021.
- 15. Canay, I. A., A. Santos, and A. M. Shaikh (2021): "The Wild Bootstrap with a "Small" Number of "Large" Clusters", The Review of Economic and Statistics, 103 (2), 346-363.
- 16. Cai, Y., Canay, I. A., Kim, D., and A. M. Shaikh (2023): "On the implementation of Approximate Randomization Tests in Linear Models with a Small Number of Clusters", Journal of Econometric Methods, 12 (1), 85-103.
- 17. Canay, I. A, M. Mogstad, and J. Mountjoy (2024): "On the Use of Outcome Tests for Detecting Bias in Decision Making", The Review of Economic Studies, 91 (4), 2135–2167.
- 18. Canay, I. A, G. Illanes, and A. Velez (2024+): "A User's Guide for Inference in Models Defined by Moment Inequalities", accepted at the Journal of Econometrics.
- Bugni, F. A., I. A. Canay, M. Tabord-Meehan, and A. Shaikh (2024+): "Inference for Cluster Randomized Experiments with Non-ignorable Cluster Sizes", accepted at the Journal of Political Economy: Microeconomics.

Working Papers

- 20. "Decomposition and Interpretation of Treatment Effects in Settings with Delayed Outcomes," joint with Federico Bugni and Steve McBride. Submitted.
- 21. "Testing Conditional Stochastic Dominance at a Point", joint with Federico Bugni and Deborah Kim.

Work in Progress

22. "Inference for Cluster Randomized Experiments with Covariate Adjustments", joint with Colin Aitken, Federico Bugni, Max Tabord-Meehan, and Azeem Shaikh.

Professional Activities

Editorial Services

- Co-Editor, Journal of Business & Economic Statistics. 2021-24.
- Associate Editor, Journal of Econometrics. 2018-22.
- Associate Editor, Journal of Business & Economic Statistics. 2018-21.
- Associate Editor, The Econometrics Journal. 2012-15, 2015-18, 2018-21.

Referee: Annals of Statistics, Econometrica, Econometric Reviews, Econometric Theory, Empirical Economics, European Research Council, Journal of Industrial Economics, Journal of Business & Economic Statistics, Journal of Econometrics, Journal of Political Economy, Journal of the American Statistical Association, National Science Foundation, Quantitative Economics, Quarterly Journal of Economics, Review of Economic Studies, Review of Economics and Statistics. Scandinavian Journal of Statistics.

Professional Activities

Professional Services

- Program Committee, Econometric Society World Congress, Seoul, Korea. 2025
- Microeconometrics Program Leader for National Science Foundation/Conference on Econometrics and Mathematical Economics. 2015-2023.
- Program Committee, North American Winter Meeting of the Econometric Society. 2017, 2019.
- Program Committee, North American Summer Meeting of the Econometric Society. 2012
- Program Committee, Latin American Meeting of the Econometric Society. 2009,-11,-13, 17-18.

Conference Organizer

- "Interactions: Bringing Together Econometrics and Applied Microeconomics". Northwestern University. September 2023.
- "Conference of Former Northwestern Econometric Students". Northwestern University. September 2021.
- "Interactions: Bringing Together Econometrics and Applied Microeconomics". Northwestern University. September 2018.
- "Interactions: Bringing Together Econometrics and Applied Microeconomics". Northwestern University. September 2016.
- "First Conference in Econometric Theory at UdeSA". Universidad de San Andrés. December 2013.
- "Junior Festival on New Developments in Microeconometrics". Northwestern University. March 2012.

Service at Northwestern University

- Junior Faculty Recruiting Chair. 2016-2024.
- Junior Faculty Recruiting Committee. 2014-2016.
- Executive Committee. Institute for Data, Econometrics, Algorithms and Learning (IDEAL). 2021-2024.

Awards & Keynotes

- 2023 Invited lecture at 2023 Annual Meeting of the Latin American and Caribbean Economic Association (LACEA) and the Latin American Meeting of the Econometric Society (LAMES), Bogota, Colombia.
- 2022 Arnold Zellner Award for best theory paper published in 2020-2021 in the Journal of Econometrics. Paper: "Testing Continuity of a Density via g-order statistics in the Regression Discontinuity Design"
- 2021 Rolf Mantel Lecture of the 2021 meeting of the Argentine Economic Association (AAEP), November 18th, Buenos Aires, Argentina.
- 2019 Elected Fellow, International Association for Applied Econometrics.
- 2019 Best Associate Editor award, Journal of Econometrics.
- 2019 National Science Foundation TRIPODS (Transdisciplinary Research in Principles of Data Science) grant HDR 1934931. Co-PI. Title: Institute for Data, Econometrics, Algorithms and Learning (IDEAL). in collaboration with computer science, statistics, economics, electrical engineering, and operations research at Northwestern University, Toyota Technological Institute at Chicago, and the University of Chicago. 2019-2022.
- 2015 National Science Foundation Grant SES 1530534. Title of grant: "Econometric Methods for Models with Clustered Data and Covariate-Adaptive Randomization", in collaboration with Azeem M. Shaikh. 2015-2018.
- 2015 Invited Lecture on Partial Identification at the 11th World Congress of the Econometric Society.
- 2013 Susan Schmidt Bies Fund for the project "Optimal Treatment Assignment in Randomized Controlled Experiments". Northwestern University.

- 2011 National Science Foundation Grant SES 1123586. Title of grant: "Extending the Scope of Inference in Partially Identified Models", in collaboration with Federico A. Bugni. 2011-2014.
- 2007 Alice Gengler Wisconsin Distinguished Graduate Fellowship. UW Madison.
- 2006 Richard E. Stockwell Graduate Student Fellowship. UW Madison.
- 2005 Anna Morris Ely Scholarship (Distinguished TA). Department of Economics. UW Madison.
 - Harold Groves Prize: "Corruption, Ownership and Mixtures of Efficiency Measures: Application to the Electricity Sector in Latin America." UW Madison.

VISITING POSITIONS

Visiting Scholar

- University of Chicago, Department of Economics. Spring 2013.
- University College London, Department of Economics. May 2013.
- Economic Research Initiatives at Duke University. November 2013.
- Universidad de San Andrés. Argentina. Summers 2009-13.

RECENT CONFERENCES & SEMINARS

- 2024 UW-Madison. Chamberlain Seminar (virtual). Banco de la Republica, Colombia (virtual). Econometrics in Rio, Brazil. Singapore National University, Singapore. Singapore Management University, Singapore. Aarhus University, Denmark. Cornell University. Duke University. University of Southern California.
- 2023 UCLA. University of California, Berkeley. University of California San Diego. Universidad Adolfo Ibáñez, Chile. Uber. Invited lecture at 2023 Annual Meeting of the Latin American and Caribbean Economic Association (LACEA) and the Latin American Meeting of the Econometric Society (LAMES), Bogota, Colombia.
- 2022 University of California, Santa Barbara. University College London. University of Cambridge, Uk. University of Toronto. University of Kentucky. Interactions Conference, University of Wisconsin-Madison.
- 2021 Hong Kong University of Science and Technology. Empirical Implementation of Theoretical Models of Strategic Interaction and Dynamic Behavior, 2021 SITE conference.
 2021 Conference on Econometrics, Cowles Foundation. Rolf Mantel Lecture of the 2021 meeting of the Argentine Economic Association (AAEP), Argentina.
- 2020 Harvard/MIT. 12th World Congress of the Econometric Society. University of Calgary.

TEACHING

Northwestern University, Evanston, IL USA

Math 386-2: Advanced Econometrics for MMSS Students. Spring 2025-.

Econ 480: Introduction to Econometrics (Graduate). Spring 2016-24.

Econ 481: Topics in Econometric Theory (Graduate). Winter 2009-24.

Econ 483: Advanced Econometric Methods (Graduate). Fall 2012-14.

Math 385: Statistical Methods for MMSS Students. Fall 2008-14.

University of Wisconsin - Madison, Madison, WI USA

Teaching Assistant: Econ 410. Introductory Econometrics. 2004-06 Teaching Assistant: Econ 101. Principles of Microeconomics. 2003-04.

University of Buenos Aires, Buenos Aires, Argentina.

Teaching Assistant: Econometrics II (Graduate). M. A. in Economics. 2003.

Teaching Assistant: Econometrics I (Graduate). M. A. in Economics. 2001-02.

Teaching Assistant: Introductory Econometrics. 1999 - 2003.

Teaching Assistant: Mathematics for Economist. 1999 - 2002.

Universidad Argentina de la Empresa (UADE), Buenos Aires, Argentina.

Lecturer: Introductory Microeconomics. 2001-03.

Teaching Assistant: Introductory Econometrics. 2001-03

Executive Program in Regulation of Public Utilities

Lecturer: Productive Frontiers Analysis and Econometrics at: Universidad Argentina de la Empresa (UADE). Buenos Aires, ARGENTINA. 2000-03. Sectoral Regulation System (SIRESE). La Paz, BOLIVIA. May 2003. Regulatory Agency of Water and Sewerage Services (ECAPAG). Guayaquil, ECUADOR. August 2002. Regulatory Agency of Public Utilities (ARESEP).

STUDENTS

2024 Amilcar Velez (Northwestern, Committee chair).

On the academic market in 2024.

Filip Obradovic (Northwestern, Committee co-chair).

On the academic market in 2024.

2023 Deborah Kim (Northwestern, Committee chair).

First Job: University of Warwick, UK.

Ahnaf Rafi (Northwestern, Committee co-chair).

First Job: University of Virginia.

 $2022\,$ Yong Cai (Northwestern, Committee chair).

First Job: BFI postdoc & University of Wisconsin-Madison.

2021 Isaac Loh (Northwestern, Committee member).

First Job: University of North Carolina.

2020 Joseph Hardwick (Northwestern, Committee chair).

First Job: University of Chicago.

Ryan Lee (Northwestern, Committee chair).

First Job: Bates and White.

2019 Max Tabord-Meehan (Northwestern, Committee chair).

First job: University of Chicago.

2018 Vishal Kamat (Northwestern, Committee chair).

First job: BFI postdoc & Toulouse School of Economics, France.

Eric Mbakop (Northwestern, Committee chair).

First job: University of Calgary, Canada.

2017 Sofya Budanova (Northwestern, Committee chair).

First job: ICEF, Moscow.

2017 Sergey Gitlin (Northwestern, Committee co-chair).

First job: Uber.

2016 Yi Sun (Northwestern, Committee chair).

First job: University of Sydney, Australia.

2015 Shruti Sinha (Northwestern, Committee co-chair).

First job: Toulouse School of Economics, France.

2014 Arkadiusz Szydlowski (Northwestern, Committee member).

First job: University of Leicester, United Kingdom.

2013 Joachim Freyberger (Northwestern, Committee member).

First job: University of Wisconsin-Madison.

Matt Masten (Northwestern, Committee member).

First job: Duke University.

2010 Maria Ponomareva (Northwestern, Committee member).

First job: Western Ontario, Canada.

OTHER POSITIONS Amazon Scholar. Device Economics Team. July 2021 - March 2024.

Research Associate, Economic Regulation Research Center, UADE, Argentina. November 2001 - August 2003. Research Assistant, June 2000 - October 2001.

Consulting Projects

- 2003 Water and Energy Regulatory Agency (URSEA). Project: "Energy Distribution in Uruguay: Benchmarking Analysis". Uruguay.
 - National Competition Commission. Project: "Measuring the Level of Competition in the Dairy Industry". Argentina.
- 2002 Energy Regulatory Agency. Project: "Measuring the efficiency of 64 electricity utilities for the 2003-05 regular price review conducted by ANNEL". Brazil.

- National Competition Commission. Project: "Measuring the Level of Competition in the Petrochemical Industry". Argentina.
- The World Bank. Projects: "Study for the Design of a Social Tariff for the Infrastructure Services in Argentina" and "Performance of Private Sector Concessions for Infrastructure Services in Latin America". Argentina.
- Association of Utilities in Argentina. Project: "Privately-Owned Utilities in Argentina: Analysis of their Contribution to the Competitiveness of the Country".

BIRTHDAY AND CITIZENSHIP January 1978. Argentinean and U.S. Citizen.

MARITAL STATUS Married. Two children.