

CURRICULUM VITAE – NOVEMBER 2023

NAME : Christian Trudeau
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FIELDS OF SPECIALIZATION : Game Theory, Public Economics, Industrial Organization

EDUCATION
2009 : Ph.D. in Economics, Université de Montréal.
2003 : Master's in Economics, Université de Sherbrooke.
2002 : Bachelor's in Economics, Université de Sherbrooke.

PROFESSIONAL ACTIVITIES

Since July 2018 : Full professor, University of Windsor.
July 2013-June 2018 : Associate professor, University of Windsor.
July 2008-June 2013 : Assistant professor, University of Windsor.
Winter-Summer 2008 : Visiting professor, Université de Sherbrooke.

GRANTS AND FELLOWSHIPS

2019-2024 : Social Sciences and Humanities Research Council of Canada, Insight Research Grant,, *Mechanism design and surplus sharing with externalities*, \$59,500.
2014-2019 : Social Sciences and Humanities Research Council of Canada, Insight Research Grant, *Fairness, Stability and Non-Manipulability in the Presence of Intermediaries*, \$57,000.
2010-2014 : Social Sciences and Humanities Research Council of Canada, Standard Research Grant, *Allowing Subsidies in Cost Sharing Problems*, \$47,000.
2004-2008 : Ph.D. Fellowship, Department of Economics, Université de Montréal.
2003-2004 : Alumni Fellowship, Department of Economics, Université de Montréal.

AWARDS

2015 : Faculty Performance Award - Faculty of Science, 2015
2015 : Faculty Teaching Score Award - Economics, 2015
2009 : Dissertation selected in top 5% in Economics department history, U. Montréal.

REFEREEING

Journal of Economic Theory, Games and Economic Behavior, Social Choice and Welfare, International Journal of Game Theory, Economics Letters, Economic Theory, Mathematical Social Sciences, Review of Economic Design, European Journal of Operations Research, Economics Bulletin, B.E. Journal of Theoretical Economics, B.E. Journal of Economic Analysis & Policy, Journal of Mathematical Economics, Discrete Applied Mathematics, Mathematical Methods of Operations Research, Journal of Environmental Economics and Policy, PLOS ONE, TOP, Annals of Operations Research, Environmental and Resource Economics, American Journal of Agricultural Economics, Central European Journal of Operations Research, Social Sciences and Humanities Research Council of Canada, Agence Nationale de Recherche (France).

TEACHING

Undergraduate level

Intermediate Microeconomics I and II
Public Economics: Expenditure
Public Economics: Taxation
Industrial Organization Theory
Advanced Microeconomics

Graduate Level

Microeconomic Theory I and II
Industrial Organization

Supervision

Leanne Streekstra, Essays in Cooperative Game Theory, Doctoral thesis, University of Southern Denmark (co-supervisor)
Various Master's major papers.

LIST OF PUBLICATIONS – CHRISTIAN TRUDEAU

PUBLISHED/ACCEPTED PAPERS

- (1) *On Groves mechanisms for costly inclusion* (with A. Mackenzie), **Theoretical Economics** 18 (2023), pp. 1181-1223.
- (2) *Minimum cost spanning tree problems as value sharing problems*, **International Journal of Game Theory**, 52 (2023), 253-272.
- (3) *Interdependent Security Games in a Unidirectional Network* (with E. Rosenthal), **Risk Analysis**, forthcoming.
- (4) *Minimum coloring problem with weakly perfect graphs* (with E. Bahel), **Review of Economic Design** 26 (2022), 211-231.
- (5) *Economic Impact of Drowning in the Great Lakes Region of North America* (with C. Houser and M. Arbex), **Ocean and Coastal Management** 212 (2021), 105847.
- (6) *Clique games: a family of games with coincidence between the nucleolus and the Shapley value* (with J. Vidal-Puga), **Mathematical Social Sciences** 103 (2020), 8-14.
- (7) *A cost sharing example in which subsidies are necessary for stability* (with E. Bahel), **Economics Letters** 185 (2020), article 108701.
- (8) *Stability and fairness in the job scheduling problem* (with E. Bahel), **Games and Economic Behavior** 117, (2019), 1-14.
- (9) *Should the more efficient firm expand? A bargaining perspective* (with Z. Wang), **Economics Letters** 180 (2019), 25-27.
- (10) *From the bankruptcy problem and its Concede-and-Divide solution to the assignment problem and its Fair Division solution*, **Games and Economic Behavior** 108 (2018), pp. 225-238 (special issue in honor of Lloyd Shapley).
- (11) *Stable Cost Sharing in Production Allocation Games* (with E. Bahel), **Review of Economic Design** 22 (2018), 25-53.
- (12) *Consistency Requirements and Pattern Methods in Cost Sharing Problems with Technological Cooperation* (with E. Bahel), **International Journal of Game Theory** 47 (2018), 737-765.
- (13) *On the set of extreme core allocations for minimum cost spanning tree problems* (with J. Vidal-Puga), **Journal of Economic Theory** 169 (2017), 425-452.
- (14) *Minimum incoming cost rules for arborescences* (with E. Bahel), **Social Choice and Welfare** 49 (2017), 287-314.
- (15) *Optimal tax policy under heterogeneous environmental preferences* (with M. Arbex and S. Behringer), **Economics Letters** 157 (2017), 79-82.
- (16) *Minimum Cost Spanning Tree Problems with Indifferent Agents*, **Games and Economic Behavior** 84 (2014), 137-151.
- (17) *Shapley-Shubik Methods in Cost Sharing Problems with Technological Cooperation* (with E. Bahel), **Social Choice and Welfare** 43 (2014), 261-285.
- (18) *Stable Lexicographic Rules for Shortest Path Problems* (with E. Bahel), **Economic Letters** 125 (2014), 266-269.
- (19) *Characterizations of the Cycle-Complete and Folk Solutions for Minimum Cost Spanning Tree Problems*, **Social Choice and Welfare** 42 (2014), 941-957.
- (20) *Linking the Kar and Folk Solutions Through a Problem Separation Property*, **International Journal of Game Theory** 43 (2014), 845-870.
- (21) *A Discrete Cost Sharing Model with Technological Cooperation* (with E. Bahel), **International Journal of Game Theory** 42 (2013), 439-460.
- (22) *Characterizations of the Kar and Folk Solutions for Minimum Cost Spanning Tree Problems*, **International Game Theory Review** 15 (2013). (invited paper)
- (23) *A New Stable and More Responsive Cost Sharing Solution for Minimum Cost Spanning Tree Problems*, **Games and Economic Behavior** 75 (2012), 402-412.
- (24) *Poverty, Informality and the Optimal General Income Tax Policy*, (with M. Arbex and E. Mattos), **B.E. Journal of Economic Policy and Analysis** 12 (2012).
- (25) *Cost Sharing with Multiple Technologies*, **Games and Economic Behavior** 67 (2009), 695-707.
- (26) *Network Flow Problems and Permutationally Concave Games*, **Mathematical Social Sciences** 58 (2009), 121-131.

BOOK CHAPTERS

- (1) The Shapley value in minimum cost spanning tree problems (with J. Vidal-Puga), in **Game Theory: The Shapley value**, Taylor and Francis Group, E. Algaba, V. Fragnelli, J. Sanchez-Soriano (eds), 2020.
- (2) When are operations research algorithms useful in fair division problems?, in **The Future of Economic Design**, Springer, J.-F. Laslier, H. Moulin, R. Sanver, W. S. Zwicker (eds.), 2020.

SUBMITTED PAPERS

- (1) *Queueing games with an endogenous number of machines* (with A. Atay), **Games and Economic Behavior**, revise and resubmit.
- (2) *Stable source connection and assignment problems as multi-period shortest path problems* (with L. Streekstra), **International Journal of Game Theory**, revise and resubmit.

WORKING PAPERS AND CURRENT PROJECTS.

- (1) *Value capture: Competitive advantage through balanced renegotiations* (with M. Ryall)
- (2) *The pipeline externalities games* (with E. Rosenthal).
- (3) *Mechanisms for a regulated monopoly* (with A. Mackenzie).
- (4) *Core constraints in scheduling with deadlines* (with L. Streekstra).
- (5) *Optimistic and pessimistic approaches for cooperative games* (with A. Atay)
- (6) *Semi-convex TU games* (with E. Bahel and H. Wang).
- (7) *Queueing problems when agents can move* (with A. Atay)
- (8) *Serial cost sharing for scheduling problems with an endogenous number of machines* (with S. Banerjee)

COMMUNICATIONS

«Optimistic and pessimistic approaches for cooperative games», Ottawa Microeconomic Theory Workshop, 2023.

«The pipeline externalities game», 13th Conference on Economic Design (Girona, Spain), Applied Mathematics, Modeling and Computational Science (AMMCS) conference (Waterloo), 2023.

«Value Capture : Competitive Advantage through Balanced Renegotiations», Société canadienne de science économique (SCSE) (Quebec City). Canadian Economic Association (CEA) Annual Conference, 2023.

«Auction-like mechanisms for efficient collusion under asymmetric information», Université Laval, HEC Montréal, Concordia University, Carleton University, 2022.

«Queueing and sequencing games with an endogenous number of machines », 12th Conference on Economic Design (Padova, Italy), 2022.

«Minimum cost spanning tree problems as value sharing and airport problems », Corvinus Game Theory seminar series, virtual, 2022.

«Minimum cost spanning tree problems as value sharing problems », European Meeting on Game Theory (SING16) virtual, 2021.

«Core constraints when scheduling with deadlines », International Conference on Social Choice and Voting Theory, virtual, 2021.

«Stable source connection and matching problems as time-varying shortest path problems », University of Saskatchewan Economics Seminars Series, 2019.

«Choosing between mutually non-exclusive social groups », Société canadienne de science économique (Quebec City), Fair Allocation in Multi-Agents Systems Workshop (Montreal), Applied Mathematics, Modeling and Computational Science (AMMCS) conference (Waterloo), 2019.

«Marginal cost coverage and centralized production mechanisms », Spain-Italy-Netherlands 14th Game Theory Meetings (SING), (Bayreuth, Germany), 2018.

«Fairness, stability and complementarity: a cooperative game approach to the job scheduling problem », Advances in Fair Division workshop (St. Petersburg, Russia), 17th SAET Conference on Current Trends in Economics (Faro, Portugal), 2017. Maastricht University Economics seminar, 2018.

«Should the most efficient firm invest in its capacity? A value capture approach », Société canadienne de science économique (SCSE) (Ottawa), 2017. Canadian Economic Association (CEA) Annual Conference, 2018.

«From the bankruptcy problem and its Concede-and-Divide solution to the assignment problem and its Fair Division solution», University of Guelph economics seminar series, 2016.

« From spanning trees to arborescences: new and extended cost sharing solutions », CETC. (Montreal), 2016.

«A Characterization of the Fair Division Solution for the Assignment Problem », University of Barcelona Game Theory seminar Series, University of Vigo Economics Seminar Series, 2015, 5th World Congress of the Game Theory Society (Maastricht, Netherlands), CEA, 2016.

«On the Set of Extreme Core Allocations for Minimal Cost Spanning Tree Problems », Université Paris-Dauphine Decision, Interaction and Markets Seminar Series, Université de Franche-Comté Economics Seminar Series, University of Glasgow Microeconomic Theory Seminar series, University of Rochester Microeconomic Theory Seminar Series, SING (St. Petersburg, Russia), 2015.

«Government Policies and Preferences for Environmental Quality », CEA (Toronto), 2015.

«Stable Cost Sharing in Production Allocation Games », 12th Meeting of the Society of Social Choice and Welfare (Boston), 2014.

« Assignment, Communication Graph, Stability and Non-Manipulability », SCSE (Ottawa), SING (Krakow), 2014.

« Minimum Cost Spanning Tree Problems with Indifferent Agents », 4th Workshop on Cooperative Games in Multiagent Systems (St. Paul, MN), SING (Vigo, Spain), Virginia Tech Economics Seminar Series, 2013.

« Consistency Requirements and Pattern Methods in Cost Sharing Problems with Technological Cooperation », CETC (Montreal), Society of Economic Design 2013 conference (Lund, Sweden), 2013.

« Characterizations of the Cycle-Complete and Folk Solutions for Minimum Cost Spanning Tree Problems », UECE Lisbon Game Theory Meetings, University of Vigo Economics Seminar Series, SCSE (Mont-Tremblant, QC), SING (Budapest), 2011-12.

« A New Stable and More Responsive Cost Sharing Solution for Minimum Cost Spanning Tree Problems », Virginia Tech Economics Seminar Series, Society of Economic Design 2011 conference (Montreal), SING (Paris), 2011.

« Linking the Kar and Folk Solutions Through a Problem Separation Property », Rice University seminar series, Université Laval seminar series, CETC (Montreal), 2010.

« Automatic User Contributions and Price Competition », Midwest Economics Association annual conference (Cleveland, OH), International Industrial Organization Conference (Boston), 2009.

« Location Responsibility and Cost Sharing in Minimal Cost Spanning Tree Problems », SCSE (Sainte-Adèle, QC), 2009.

« Cost Sharing with Multiple Technologies », CRAI (Toronto), University of Waterloo, University of Windsor, Canadian Economic Association conference (Halifax), SCSE (Quebec City) , U. de Sherbrooke , 2007-2008.

ADMINISTRATIVE TASKS

University of Windsor

- University Senator
- Anomalies Committee - University of Windsor
- Strategic Planning Committee for Research - Faculty of Science
- Renewal Tenure Promotion Committee - Faculty of Science
- Hiring Committee – Department of Economics
- Head Search Committee – Department of Economics
- Graduate Committee – Department of Economics
- Seminar Series Coordinator - Department of Economics
- Working paper series Coordinator - Department of Economics

Academic community

- Associate Editor – Journal of Canadian Baseball/Revue de baseball canadien
- International Conference on Social Choice and Voting Theory - Organizing Scientific Committee
- SSHRC Insight Grants Adjudication Committee – Economics (4 times)
- Review of undergraduate programs - Department of Economics - Saint Mary's University

Community

- School board trustee – CSC Providence
- Canadian Baseball Hall of Fame - Special Election Committee on pre-1969 candidates
- Society of American Baseball Researchers – membership, various contributions to their publications
- Judge - Windsor Regional Science, Technology & Engineering Fair
- Various interviews (Radio-Canada, RDI)