Marcus Pivato February 9, 2024

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Centre d'Économie de la Sorbonne
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Education: Ph.D. in Mathematics, University of Toronto (2001).

B.Sc. in Mathematics, University of Alberta (1994).

Citizenship: Canadian.

Languages: English (native); French (intermediate; working competency).

Research: Social choice theory, social welfare, decision theory, normative economics.

Current positions

• Professeur des universités, classe exceptionnelle, Université Paris 1 Panthéon-Sorbonne, affiliated with the laboratoire CES (*Centre d'Économie de la Sorbonne*).

- Research affiliate, Global Priorities Institute, University of Oxford.
- Council of the Society for Social Choice and Welfare (2018-2024).
- Computational Social Choice Workshop Steering Committee (2023-2027).
- Advisory Board, Centre for Mathematical Social Science, University of Auckland.
- Research Associate, Centre for Philosophy of Natural and Social Science at the LSE.
- Associate member, Institut d'histoire et de philosophie des sciences et des techniques, Paris.

Editorial positions

- Managing Editor, Social Choice and Welfare (since 2024).
- Co-Editor, Economic Theory (since 2023).
- Co-Editor, Economic Theory Bulletin (since 2023).
- Editorial board member, Theory and Decision (since 2017).
- Editorial board member, Mathematical Social Sciences (since 2015).

Awards and Honours

2023 Selected as *Economic Theory Fellow* by the Society for the Advancement of Economic Theory. (https://saet.uiowa.edu/economic-theory-fellows)

2023-2024 CNRS délégation (half-year paid research leave).

2023-2024 Labex MME-DII délégation (half-year paid research leave, declined).

2021 Promotion to Professeur des universités de classe exceptionnelle.

2019-2023 Prime d'encadrement doctoral et de recherche (€7000/year).

2018-2020 Subvention IDEX Paris-Seine (€106 000, co-applicant Mathieu Martin).

2017-2020 Subvention IDEX Paris-Seine (€279 000, co-applicant Mathieu Martin).

- 2014-2018 Labex MME-DII Chaire d'Excellence, Université de Cergy-Pontoise.
- **2008-2013** NSERC¹ Discovery Grant (CAD \$90 000).
 - 2006 Promoted to Associate Professor at Trent University, Canada.
 - **2005** Merit Award for research and university service (Trent University).
 - 2005 Van Vleck Visiting Researcher at Wesleyan University (01/2005-05/2005).
 - 2004 Nominated for Symons Teaching Award (Trent University).
- 2003-2008 NSERC Discovery Grant (CAD \$50000).

Commissioned expository articles

- [1] Social Evaluation Under Risk and Uncertainty, Philippe Mongin and M. Pivato, Chapter 24 of the Handbook of Well-being and Public Policy, edited by Matthew D. Adler and Marc Fleurbaey, pp. 711-745, Oxford University Press, 2016.
- [2] The ergodic theory of cellular automata, M. Pivato, in the *Encyclopedia of Complexity* and System Science, Robert A. Meyers, ed. (Springer-Verlag, 2009), pp. 2980-3015.

Journal publications in economics^{*}

- ★ [3] Bayesian social aggregation with almost-objective uncertainty, M. Pivato and Flore Tchouante, to appear in *Theoretical Economics*, 2024
 - [4] Bayesian social aggregation with non-Archimedean utilities and probabilities, M. Pivato and Flore Tchouante, to appear in *Economic Theory*, 2024
 - [5] Cesàro average utilitarianism in relativistic spacetime, M. Pivato, Social Choice & Welfare **61**, pp. 733-761, 2023.
- ★ [6] A characterization of Cesàro average utility, M. Pivato, Journal of Economic Theory **201**, 105440, 2022.
- ★ [7] Bayesian social aggregation with accumulating evidence, M. Pivato, Journal of Economic Theory 200, 105399, 2022.
- ★ [8] The median rule in judgement aggregation, Klaus Nehring and M. Pivato, Economic Theory 73, pp. 1051-1100, 2022.
 - [9] Intertemporal choice with continuity constraints, M. Pivato, Mathematics of Operations Research 46 (#3), pp. 1203-1229, 2021.
 - [10] Rawls's Difference Principle and maximin rule of allocation: a new analysis, Philippe Mongin and M. Pivato, Economic Theory 71(#4), pp. 1499-1525, 2021.

¹NSERC = Natural Sciences and Engineering Research Council of Canada.

 $[\]star$ The most significant publications are indicated by " \star ".

[11] Deliberation and epistemic democracy, Huihui Ding and M. Pivato, Journal of Economic Behavior and Organization 185, pp. 138-167, 2021.

- [12] Social preferences under twofold uncertainty, Philippe Mongin and M. Pivato, Economic Theory 70 (#3), pp. 633-663, 2020.
- [13] Rank-additive population ethics, M. Pivato, Economic Theory 69 (#4), pp. 861-918, 2020.
- [14] Subjective expected utility with imperfect perception, M. Pivato and Vassili Vergopoulos, Journal of Mathematical Economics 88, pp. 104-122, 2020.
- [15] Weighted representative democracy, M. Pivato and Arnold Soh, *Journal of Mathematical Economics* 88, pp. 52-63, 2020.
- [16] Subjective expected utility with a spectral state space, M. Pivato, Economic Theory 69 (#2), 2020, pp. 249-313.
- ★[17] Majority rule in the absence of a majority, Klaus Nehring and M. Pivato, Journal of Economic Theory 183, 2019, pp. 213-257.
- **★[18]** Truth-revealing voting rules for large populations, Matias Núñez and M. Pivato, Games & Economic Behavior **113**, 2019, pp. 285–305.
 - [19] Evolutionary stability of bargaining and price-posting: Implications for formal and informal activities, Nejat Anbarci, Pedro Gomis-Porqueras, and M. Pivato, Journal of Evolutionary Economics, 28 (#2), 2018, pp. 365-397.
 - [20] Epistemic democracy with correlated voters, M. Pivato Journal of Mathematical Economics 72, 2017, pp. 51-69.
 - [21] The Efficiency of Tenure Contracts in Academic Employment, by Bruce Cater, Byron Lew and M. Pivato, Journal of Public Economic Theory, 19 (#2), 2017, pp. 331-361.
 - [22] Asymptotic utilitarianism in scoring rules, M. Pivato. Social Choice and Welfare, 47(#2), 2016, pp. 431-458.
 - [23] Unanimity Overruled: Majority Voting and the Burden of History, by Klaus Nehring, M. Pivato, and Clemens Puppe, Journal of Theoretical Politics, 28 (#4), 2016, pp. 552-597.
 - [24] Social choice with approximate interpersonal comparisons of welfare gains, by M. Pivato, Theory & Decision, 79 (#2), 2015, pp. 181-216.
 - [25] Condorcet meets Bentham, by M. Pivato. Journal of Mathematical Economics, 59, 2015, pp. 58-65.
- **★[26]** Ranking Multidimensional Alternatives and Uncertain Prospects, by Philippe Mongin and M. Pivato. Journal of Economic Theory, **157**, 2015, pp.146-171.

★[27] The Condorcet set: Majority voting over interconnected propositions, Klaus Nehring, M. Pivato, and Clemens Puppe, Journal of Economic Theory, 151, 2014, pp. 268-303.

- [28] Additive representation of separable preferences over infinite products, M. Pivato, Theory and Decision, 77 (#1), 2014, pp. 31-83.
- [29] Formal utilitarianism and range voting, M. Pivato, Mathematical Social Sciences, 67 (#1), 2014, pp. 50-56.
- [30] Multiutility representations for incomplete difference preorders, M. Pivato, Mathematical Social Sciences, 66 (#3), 2013, pp. 196-220
- [31] Social welfare with incomplete ordinal interpersonal comparisons, M. Pivato, Journal of Mathematical Economics, 49 (#5), 2013, pp. 405-417.
- [32] Variable population voting rules, M. Pivato, Journal of Mathematical Economics, 49 (#3), 2013, pp. 210-221.
- [33] Voting rules as statistical estimators, M. Pivato, Social Choice & Welfare 40 (#2), 2013, pp. 581-630.
- [34] Risky social choice with incomplete or noisy interpersonal comparisons of well-being, M. Pivato, Social Choice & Welfare 40 (#1), 2013, pp. 123-139.
- [35] Incoherent majorities: The McGarvey problem in judgement aggregation, Klaus Nehring and M. Pivato, Discrete Applied Mathematics 159, 2011, pp.1488-1507.
- [36] Geometric models of consistent judgement aggregation, M. Pivato, Social Choice & Welfare 33 (#4), 2009, pp.559-574.
- [37] Twofold optimality of the relative utilitarian bargaining solution, M. Pivato, Social Choice & Welfare 32 (#1), 2009, pp.79-92.

Publications in refereed volumes (economics)

- [38] Statistical utilitarianism, M.Pivato, in *The political economy of social choices* (Maria Gallego and Norman Schofield, eds.), Studies in political economy, Springer-Verlag, 2016, pp. 187-205.
- [39] How indeterminate is sequential majority voting? A judgement aggregation perspective, Klaus Nehring and M. Pivato, in *The Mathematics of Decisions, Elections, and Games* (Crisman, Karl-Dieter and Jones, Michael A., editors), volume 624 of *Contemporary Mathematics*, American Mathematical Society, 2014, pp. 55-88.

Journal publications in philosophy

[40] Population ethics in an infinite universe, M. Pivato, Philosophical Studies 180, 2023, pp. 3383–3414.

- [41] Dynamic and stochastic systems as a framework for metaphysics and the philosophy of science, Christian List and M. Pivato, Synthese 198, 2021, pp. 2551–2612.
- **★[42]** Emergent chance, Christian List and M. Pivato, Philosophical Review **124** (#1), 2015, pp. 119-152.
 - [43] A statistical approach to epistemic democracy, M. Pivato, Episteme 9, special issue #2, 2012, pp. 115-137.
 - [44] Pyramidal Democracy, M. Pivato, Journal of Public Deliberation, Vol. 5 (#1), 2009, Article 8.

Journal publications in mathematics

- [45] Measure and integration on Boolean algebras of regular open subsets in a topological space, M. Pivato and Vassili Vergopoulos, Real Analysis Exchange 47 #1, pp. 25-62, 2022.
- [46] The ergodic theory of cellular automata, M. Pivato, International Journal of General Systems, 41 #6, 2012. (Invited expository article.)
- [47] Positive expansiveness versus network dimension in symbolic dynamical systems, M. Pivato, Theoretical Computer Science 412 #30, 2011, pp.3838-3855.
- [48] RealLife, M. Pivato. In: Andrew Adamatzky (Ed.), Game of Life Cellular Automata (Springer-Verlag, 2010), Chapter 12, pp.223-234.
- [49] Embedding Bratteli-Vershik systems in cellular automata, M. Pivato and Reem Yassawi. Ergodic Theory & Dynamical Systems, 2010, 30, pp.1561-1572.
- [50] Emergent defect dynamics in two-dimensional cellular automata, Martin Delacourt and M. Pivato, Journal of Cellular Automata, 4 (#2), 2009, pp.111-124.
- [51] Module shifts and measure rigidity in linear cellular automata, M. Pivato, Ergodic Theory & Dynamical Systems, 28, (#6), 2008, pp.1945-1958.
- [52] The spatial structure of odometers in certain cellular automata. M. Pivato and Reem Yassawi. Proceedings of *Journées Automates Cellulaires* (Uzès, France; April 21-25, 2008), pp.119-129.
- [53] Defect particle kinematics in one-dimensional cellular automata, M. Pivato, Theoretical Computer Science, 377, (#1-3), 2007, pp.205-228.

[54] RealLife: the continuum limit of Larger than Life cellular automata, M. Pivato, Theoretical Computer Science, 372 (#1), 2007, pp. 46-68.

- ★[55] Prevalence of odometers in cellular automata, Ethan M. Coven, M. Pivato, and Reem Yassawi. Proceedings of the American Mathematical Society, 135, 2007, pp.815-821.
 - [56] Spectral domain boundaries in cellular automata, M. Pivato, Fundamenta Informaticae, 78 (#3), 2007, pp.417-447.
 - [57] Algebraic invariants for crystallographic defects in cellular automata, M. Pivato, Ergodic Theory & Dynamical Systems, 27 (#1), 2007, pp. 199-240.
 - [58] Asymptotic randomization of subgroup shifts by linear cellular automata, Alejandro Maass, Servet Martinez, M. Pivato, and Reem Yassawi, Ergodic Theory & Dynamical Systems, 26 (#4), 2006, pp.1203-1224.
 - [59] Asymptotic randomization of sofic shifts by linear cellular automata, M. Pivato and Reem Yassawi, Ergodic Theory & Dynamical Systems 26 (#4), 2006, pp.1177-1201.
 - [60] Attractiveness of the Haar measure for the action of linear cellular automata in Abelian topological Markov chains, A. Maass, S. Martinez, M. Pivato and R. Yassawi, pp. 100-108, in *Dynamics & Stochastics: Festschrift in honour of Michael Keane* (volume 48, Lecture Notes Monograph Series of Institute for Mathematical Statistics), 2006.
 - [61] Cellular automata vs. quasisturmian shifts, M. Pivato, Ergodic Theory & Dynamical Systems, 25 (#5), 2005, pp. 1583-1632.
 - [62] Invariant measures for bipermutative cellular automata, M. Pivato, Discrete & Continuous Dynamical Systems A, 12 (#4), 2005, pp. 723 736.
 - [63] Limit measures for affine cellular automata II, M. Pivato and Reem Yassawi, Ergodic Theory & Dynamical Systems, 24 (#6), 2004, pp. 1961-1980
 - [64] Interior symmetry and local bifurcation in coupled cell networks, Martin Golubitsky, M. Pivato, and Ian Stewart, Dynamical Systems: an International Journal, 19 (#4), 2004, pp.389-407.
- **★[65]** Symmetry groupoids and patterns of synchrony in coupled cell networks, Martin Golubitsky, M. Pivato, and Ian Stewart, SIAM Journal of Applied Dynamical Systems, **2** (#4), 2003, pp. 609 646.
 - [66] Estimating the spectral measure of a multivariate stable distribution via spherical harmonic analysis, M. Pivato and L. Seco, Journal of Multivariate Analysis, 87 (#2), 2003, pp. 219-240.
 - [67] Multiplicative cellular automata on nilpotent groups: Structure, entropy, and asymptotics, M. Pivato, Journal of Statistical Physics, 110(#1/2), 2003, pp. 247-267.

[68] Conservation laws for cellular automata, M. Pivato, Nonlinearity, 15, 2002, pp. 1781-1793.

- [69] Limit measures for affine cellular automata, M. Pivato and Reem Yassawi, Ergodic Theory & Dynamical Systems, 22(#6), 2002, pp. 1269-1287.
- [70] Building a stationary stochastic process from a finite-dimensional marginal, M. Pivato, Canadian Journal of Mathematics, 53(#2), 2001, pp. 382-413.
- [71] Measures of dependence for multivariate Lévy distributions, Jeff Boland, Tom Hurd, M. Pivato and Luis Seco, Disordered and Complex Systems (London, 2000) pp. 289-295; American Institute of Physics Conference Proceedings vol. 553.

Working papers

- (72) Compact spaces of continuous preferences, M. Pivato.
- (73) Universal recursive preference structures, M. Pivato.
- (74) Uncertain decisions in a continuous world, M. Pivato and Vassili Vergopoulos.

In preparation

- (75) Linear aggregation of conditional probability structures, M. Pivato.
- (76) Quadratically normalized utilitarian voting, Rajarshi Ghosh and M. Pivato.
- (77) Vague preferences, Evan Piermont and M. Pivato.
- (78) Autonomy and metapreferences, M. Pivato.
- $(79)\ \it Categorical\ decision\ theory,\ M.\ Pivato.$
- (80) E pluribus unum: supermajority determinacy in judgement aggregation, Klaus Nehring and M. Pivato.

Other scholarly publications

- Book review of *Moral Uncertainty* by William MacAskill, Krister Bykvist, and Toby Ord (Oxford University Press, 2020 viii 226 pages), M. Pivato, *Economics & Philosophy* **38**(1), 152-158, 2022.
- Philippe Mongin (1950–2020), by Jean Baccelli and M. Pivato, Theory & Decision 90, pp. 1–9, 2021.
- What Should We Agree on about the Repugnant Conclusion?, by Stéphane Zuber, et al. (twenty-nine authors) *Utilitas* **33**(4), pp. 379-383, 2021.
- Realizing epistemic democracy, M. Pivato, in The future of economic design (Jean-François Laslier, Hervé Moulin, Remzi Sanver, and William S. Zwicker, eds.), Springer-Verlag, 2019, pp. 103-112.

Edited volumes

- Décisions économiques et préférences sociales numéro spécial en hommage de Philippe Mongin, coedited with Jean Baccelli, Antoine Billot, Mikaël Cozic and Brian Hill, Revue économique 73 (#6), November 2022.
- Special issue on Logics for Social Behaviour, coedited with Alessandra Palmigiano, Studia Logica 106 (#5), October 2018.

Edited volumes in progress

- Handbook of Utility Theory, Volume III (Springer-Nature), edited by Ani Guerdjikova and M. Pivato.
- Handbook of Utility Theory, Volumes I and II (Springer-Nature), originally edited by Salvador Barberà, Peter Hammond, and Christian Seidl, 1999 and 2004, revised editions edited by Ani Guerdjikova and M. Pivato.

Textbook. Linear Partial Differential Equations and Fourier Theory, by M. Pivato, 630 pages, Cambridge University Press, 2010. ISBN: 978-0521136594.

Doctoral Thesis. Analytical Methods for Multivariate Stable Probability Distributions, Department of Mathematics, University of Toronto, 2001. (Supervisor: Luis Seco.)

Public lectures

• "Democracy is complicated", fifteen minute presentation at the Congreso Futuro, Santiago, Chile, 16 January 2020.²

Conference presentations

- 1. *Frontiers of Philosophy and Economics, Paris School of Economics, 16-17 May 2024.
- 2. *Workshop on Social Choice 4 AI Safety, University of California Berkeley, 6-8 December 2023.
- 3. *13th Oxford Workshop on Global Priorities Research, 4-5 December 2023.
- 4. *OSGAD 16 (Ordered Structures in Games and Decision), Centre d'Économie de la Sorbonne, 23 November 2023.
- 5. * Voting Theory and Aggregation, Karlsruhe Institute of Technology, 9-11 October, 2023.
- 6. *SAET (Society for the Advancement of Economic Theory), Paris, 17-21 July 2023.
- 7. *Workshop on the Applications of Topology to Quantum Theory and Behavioral Economics, The Fields Institute (Toronto), 23 24 March 2023.

²https://youtu.be/hdX--7_0VVE?si=iXHClqCAQex9CDWi

^{*} invited presentations are indicated by "*".

- 8. *Dutch Social Choice Colloquium, Erasmus University Rotterdam, 20 January 2023.
- 9. *TUS VIII (*Time, Uncertainties & Strategies*), Centre d'Economie de la Sorbonne, 14 15 December 2022.
- 10. Annual meeting of the CNRS/InSHS International Research Network *Justice et intérêt* ("Justice and Interest"), 22 November 2022; hybrid conference.
- 11. SSCW 16 (16th meeting of the Society for Social Choice & Welfare), Mexico City, 23 25 June 2022.
- 12. *Workshop on Social Aggregation Under Risk and Uncertainty, University of Warwick, 9 May 2022.
- 13. *9th Oxford Workshop on Global Priorities Research, 21-22 March 2022.
- 14. *Time, Uncertainties and Strategies VII, Paris, 14-15 December 2021.
- 15. *8th Oxford Workshop on Global Priorities Research (6-8 December 2021, video conference).
- 16. *Workshop on Awareness, Institute for Futures Studies, Stockholm, 18-19 October, 2021.
- 17. D-TEA (Decisions Theory, Experiment, Applications), Paris, 28 June -2 July 2021.
- 18. Annual meeting of the CNRS/InSHS International Research Network *Justice et intérêt* ("Justice and Interest"), 14 December 2020; video conference.
- 19. ColAForm closing meeting (8-10 October, 2020; video conference).
- 20. *Second Freedom of Choice Zoominar (7 July 2020; video conference organized by Hendrik Rommeswinkel of National Taiwan University).
- 21. *Workshop on Voting Systems, Centre des Recherches Mathématiques, Montreal, 18-19 February, 2020.
- 22. *Seminario Elección social, participación y representatividad: Una mirada desde las ciencias sociales, las humanidades y las matemáticas, Universidad de Chile, Santiago, 17 January, 2020.
- 23. *AMMCS19 (Applied Mathematics, Modeling, and Computational Science), Wilfrid Laurier University, Waterloo, Canada, 18 -23 August, 2019.
- 24. *Workshop Politiques du Bonheur, Cergy, 19-21 June 2019.
- 25. *Ethics and Trust: Principles, Verification and Validation, Schloss Dagstuhl, Germany, 22-26 April, 2019.
- 26. *Conference in Honor of John Weymark, Vanderbilt University, Nashville, USA, 13-14 April, 2019.
- 27. *TUS V (*Time, Uncertainties & Strategies*), Paris School of Economics, 17-18 December 2018.
- 28. *OSGAD 11 (Ordered Structures in Games and Decision), Paris School of Economics, 20 November 2018.
- 29. *Conference on Compromise rules revisited, Istanbul Bilgi University, 30 October 2018.
- 30. SSCW 14 (14th meeting of the Society for Social Choice & Welfare), Seoul, South Korea, 14-17 June 2018.
- 31. SAET (Society for the Advancement of Economic Theory), Taipei, Taiwan, 11-13 June 2018.

- 32. PET 18 (Public Economic Theory), Hue, Vietnam, 6-8 June 2018.
- 33. *8th Murat Sertel Workshop on Economic Design, Decision, Institutions, and Organization, Caen, 22-23 May, 2018.
- 34. *Workshop on population, ethics and economic policy, Paris School of Economics, 5 April, 2018.
- 35. *Workshop on Reasons, Rationality, and Intentional Agency, London School of Economics, 29-30 September, 2017.
- 36. *Workshop on Opinion Dynamics and Collective Decision, Jacobs University Bremen, Germany, 5-7 July 2017.
- 37. SAET (Society for the Advancement of Economic Theory), Faro, Portugal, 25-30, June 2017.
- 38. D-TEA (Decisions Theory, Experiment, Applications), Paris, 29 May-31 June 2017.
- 39. *Workshop on Decision-Making and Contest Theory, Bar Ilan University, Israël, 23-26 January 2017.
- 40. GAMES (5th World Congress of the Game Theory Society), Maastricht University, Holland, 24-28 July, 2016.
- 41. LOFT (Logic and Foundations of Game and Decision Theory), Maastricht University, Holland, 20-22 July, 2016.
- 42. SING12 Meeting on Game Theory, Syddansk Universitet, Odense, Denmark, 11-13 July, 2016.
- 43. SSCW 13 (13th meeting of the Society for Social Choice & Welfare), Lunds Universitet, Sweden, 28-30 June 2016.
- 44. RUD (Risk, Uncertainty, Decisions), Université Paris-Dauphine, 22-24 June 2016.
- 45. *New perspectives on Agency, London School of Economics, 9-10 June 2016.
- 46. *Engineering Moral Agents, Schloss Dagstuhl, Germany, 29 May- 3 June, 2016.
- 47. *Logics for social behaviour, University of Zürich, Switzerland, 8-11 February 2016.
- 48. *TUS II (*Time, Uncertainties & Strategies*), Paris School of Economics, 14-15 December 2015.
- 49. 11th World Congress of the Econometric Society, Montréal, Canada, August 17-21, 2015.
- 50. * The Political Economy of Social Choices, Oaxaca, Mexico, July 25-31, 2015.
- 51. *Plenary speaker, Trends in Logic 2015 (*Logics for Social Behaviour*), 29 June 3 July 2015, Delft University of Technology, Holland.
- 52. *Final conference of the Franco-Swedish Program for Philosophy and Economics, Uppsala, Sweden, June 8-10, 2015.
- 53. *COST Action IC1205 (Computational Social Choice), Lucian Blaga University, Sibiu, Romania, October 23, 2014.
- 54. European Meeting of the Econometric Society, August 25-29, 2014, Toulouse, France.
- 55. Meeting of the European Economic Association, August 25-29 2014, Toulouse, France
- 56. PET 14 (Meeting of the Association for Public Economic Theory), Seattle, July 11-13, 2014.

- 57. SSCW 12 (12th Meeting of the Society for Social Choice and Welfare), Boston College, June 18 21, 2014.
- 58. * Workshop on Power, Collège d'Études Mondiales, Paris, June 5-6, 2014.
- 59. D-TEA (Decisions: Theory, Experiment, Applications), HEC Paris, June 2-4, 2014.
- 60. RUD (Risk, Uncertainty, Decisions), Warwick Business School, May 28-30, 2014.
- 61. *Workshop on *Deliberation, Aggregation and Consensus*, October 22, 2013, Département d'études cognitives, École Normale Supérieure, Paris.
- 62. AMMCS 13 (Applied Mathematics, Modelling, and Computational Science), Wilfrid Laurier University, Waterloo, Canada, August 26-30, 2013.
- 63. SAET (Meeting of the Society for the Advancement of Economic Theory), Paris, July 22-27, 2013.
- 64. PET 13 (Meeting of the Association for Public Economic Theory), Lisbon, July 5-7, 2013.
- 65. New Directions in Welfare III, OECD, Paris, July 3-5, 2013.
- 66. AMS Special Session on the Mathematics of Decisions, Elections, and Games at the Joint Mathematics Meetings, San Diego, January, 2013.
- 67. PET 12 (Meeting of the Association for Public Economic Theory), Taipei, June 12-15, 2012.
- 68. Second World Congress of the Public Choice Society, in Miami, March 8-11, 2012.
- 69. Montreal Natural Resources and Environmental Economics Workshop, Université du Quebec à Montréal, February 3, 2012.
- 70. AMS Special Session on the Mathematics of Decisions, Elections, and Games at the Joint Mathematics Meetings, Boston, January 5, 2012.
- 71. *Workshop, New Developments in Judgement Aggregation and Voting Theory, Freudenstadt, Germany, September 9-11, 2011.
- 72. AMMCS 11 (Applied Mathematics, Modelling, and Computational Science), Wilfrid Laurier University, Waterloo, Ontario, July 25-29, 2011.
- 73. New Directions in Welfare II, OECD, Paris, France, July 6-8, 2011.
- 74. *Episteme conference, "Social Epistemology meets Formal Epistemology", Carnegie Mellon University, June 24-26, 2011.
- 75. Meeting of the Society for Economic Design, University of Montreal, June 15-17, 2011.
- 76. North American Summer Annual Meeting of the Econometric Society, St.Louis, MO, June 9-12, 2011.
- 77. Montreal Natural Resources and Environmental Economics Workshop, McGill University, January 14, 2011
- 78. SSCW 10 10th International Meeting of the Society for Social Choice and Welfare, Moscow, July 2010
- 79. *Special Session on *Algebraic Dynamics* at the Joint Meetings of AMS/MAA, San Diego (January, 2008).
- 80. *Automata 2007, Fields Institute, Toronto, Canada, August 27-29, 2007.
- 81. CanaDAM 2007, BIRS, Alberta, Canada. May 28-31, 2007.

- 82. *Two one-hour lectures at the Workshop on *Information propagation in cellular automata*, Ecole Normale Supérieure de Lyon, February 19-21, 2007.
- 83. *Southern Ontario Dynamics Day, Fields Institute, Toronto. April 7, 2006.
- 84. *Special session on *Ergodic Theory* at the Winter 2005 meeting of the Canadian Mathematical Society, Victoria, British Columbia, December 10-12, 2005.
- 85. *Special session on *Measurable, Symbolic, and Tiling Dynamical Systems* of the Eastern Section Meeting of the American Mathematical Society, Bard College, Annandale-on-Hudson, New York, October 8-9, 2005
- 86. Fifth international conference on Dynamical Systems and Differential Equations, California State Polytechnic University, Pomona, June 16 19, 2004.
- 87. Joint International Meeting of the American Mathematical Society and the Real Sociedad Matematica Espanola, Seville, Spain, June 18-21, 2003.
- 88. Workshop on Dynamics and Randomness, Departamento de Ingeniería Matemática, Universidad de Chile, Santiago, December, 2000.

Invited seminar presentations

- 1. Economics seminar, University of Warwick, 2 November 2022.
- 2. Economics seminar, Adam Smith Business School, University of Glasgow, 25 October 2022.
- 3. Economics seminar, University of Warwick, 11 May 2022.
- 4. Welfare Economics and Economic Policy Seminar, 25 April 2022; video seminar organized by Maya Eden and Paolo Piacquadio.³
- 5. Microeconomic Theory seminar, University of California Riverside, 16 February 2022.
- 6. Séminaire Micro-Théorique et Modélisation Financière, Centre d'Économie de la Sorbonne, Université Paris 1, 27 January 2022.
- 7. Economics seminar, Royal Holloway University of London, 14 January 2022.
- 8. "Theory, Organisation, Markets" seminar, Paris School of Economics, 9 December 2021.
- 9. Colloquium lecture, Munich Centre for Mathematical Philosophy, Ludwig-Maximilians-Universität, 25 November 2021.
- 10. Microeconomics Seminar, ETH Zürich, 4 November 2021.
- 11. Guest Lecture, CY AS Institute of Advanced Studies, Neuville, 12 October 2021.
- 12. Séminaire Maths Discrètes, Optimisation et Décision, Centre d'Économie de la Sorbonne, Université Paris 1, 18 May 2021.
- 13. Economics seminar, Adam Smith Business School, University of Glasgow, 27 April 2021.
- 14. Seminar in formal and social epistemology, Sorbonne Université, 13 January 2021.
- 15. COMSOC Video Seminar International Seminar Series on Social Choice, 10 September 2020; seminar series organized by Endriss, Elkind, Merlin, Zwicker and Peters.⁴

³https://sites.google.com/view/welfareeepolicy

⁴https://sites.google.com/view/comsoc-seminar/

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- 16. International Seminar on Social Choice, 11 August 2020; Video seminar series organized by Chun, Koshevoy, Puppe, Sanver, Slinko and Zwicker.⁵
- 17. Seminar Presentation, Centro de Modelamiento Matemático, Universidad de Chile, Santiago, 15 January 2020.
- 18. Economic Theory Seminar, Centre d'Économie de la Sorbonne, Université Paris 1, 10 May 2019.
- 19. LEMMA, Université Paris II Panthéon-Assas , 2 April 2019.
- 20. Economics Seminar, Karlsruhe Institute of Technology, 7 February 2019.
- 21. Munich Center for Mathematical Philosophy, 23 January 2019.
- 22. Game theory seminar, Institut Henri Poincaré, 9 April, 2018.
- 23. Maastricht University Department of Quantitative Economics, Maastricht, Holland, 23 November 2017.
- 24. Department of Economics, Universität Heidelberg, Germany, 22 November 2016.
- 25. Department of Economics, Royal Holloway University of London, 10 November 2016.
- 26. Maastricht University School of Business and Economics, Holland, 11 November 2015.
- 27. Séminaire Géométrie, EDP et Physique Mathématique, Département de Mathématiques, Université de Cergy-Pontoise, June 1, 2015.
- 28. Economic Theory Seminar, Centre d'Économie de la Sorbonne, Université Paris 1, May 22, 2015.
- 29. Séminaire Maths Discrètes, Optimisation et Décision, Centre d'Économie de la Sorbonne, Université Paris 1, Paris, March 31, 2015.
- 30. Séminaire Décision, Rationalité, Interaction, (IHPST), Département d'Études Cognitives de l'École Normale Supérieure, Paris, February 5, 2015.
- 31. "Decision, Interaction, Markets" seminar, Université Paris-Dauphine, 27 January 2015.
- 32. Colloquium, Dept. of Mathematics, London School of Economics, 21 February 2013.
- 33. Université de Montréal Informal Economic Theory Seminar, November 2011.
- 34. Université de Montréal Informal Economic Theory Seminar, October 2011.
- 35. Department of Mathematics, SUNY Potsdam, NY, 3 June 2011.
- 36. Seminar of Laboratoire de combinatoire et d'informatique mathématique (LaCIM) at Université du Quebec à Montréal. 15 April 2011.
- 37. Choice Group Seminar of the London School of Economics, 15 February 2011.
- 38. Université de Montréal Economic Theory Reading Group, 14 October 2010.
- 39. Seminar on *Modelling and Computational Science* at the University of Ontario Institute of Technology, Oshawa, 18 November 2005.
- 40. Two one-hour lectures at the Departamento de Ingeniería Matemática, Universidad de Chile, Santiago, 25-26 October 2005.
- 41. Colloquium lecture at the Department of Mathematics & Statistics, University of Guelph, 7 October 2004.

⁵https://www.cmss.auckland.ac.nz/2020/06/03/online-social-choice-seminar-series/

Teaching experience

Supervision of postdoctoral researchers.

- Huihui Ding (2017-2020). Resultant publication: [11].
- Armel Momo Kenfack (2018-2020; co-supervisor: Mathieu Martin).
- Pierre Tisseur (2005-2006; co-supervisor Reem Yassawi).

Supervision of doctoral students.

- Rajarshi Ghosh (2020-2024).
- Raphael Gomes de Oliveira (2020-2024).
- Élise Flore Tchouante⁸ (2018-2023; co-supervisor: Mathieu Martin. Thesis title: *Essays on social choice: spatial voting and collective decision under uncertainty*, defended January 2023.) Resultant publications: [3] and [4].
- Arnold Soh Voutsa. (2017-2021; co-supervisor: Mathieu Martin. Thesis title: Choix social avec des influences sociales et des interactions spatiales et décomposition des mesures d'inégalités, defended November 2021.) Resultant publication: [15].

Supervision of M2 students.

- Rajarshi Ghosh (2020).
- Raphael Gomes de Oliveira (2020).

Courses taught at CY Cergy Paris Université (2014-)

- L1 Microeconomics P1B1 Introductory microeconomics (2018, '19, '20,'23). 10
- L2 Eco 202 Intermediate microeconomics (one half taught in Fall 2014, '15, '16, '17, '18, full course in Fall 2019).
- L2 Contemporary Economic Issues (Winter 2020, '21, '22). 11
- L3 Eco 303 Uncertainty and intertemporal choice (Fall 2014, '15, '16, '17, '18, '19, '20, '21, '22). 12
- M1 Ethical and economic issues of artificial intelligence (Winter 2021, 2022, 2023). 13
- M2 Microeconomics (one half) (Winter 2020, '21, '22, '23). 14
- M2 Mathematics for Economics (one half taught in Fall 2019, '20, '21, '22 full course in Winter 2019). 15

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6https://sites.google.com/view/huihuiding
7https://sites.google.com/view/momo-armel
8https://sites.google.com/view/elisefloretchouante
9https://sites.google.com/view/arnoldsoh
10https://sites.google.com/site/microeconomicsbachelor/home
11https://sites.google.com/site/contempeconissues/
12https://sites.google.com/site/eco303pivato/home
13https://sites.google.com/view/ethical-economic-issues-ai/home
14https://sites.google.com/site/m2advancedmicroeconomics/
15https://sites.google.com/site/mathematicsforeconomicsii/
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Courses taught at Trent University (2002-2014)

- Math 1100 Single-variable calculus (two-semester course, Fall-Winter 2002, '03, '08, '09, '10, '12, '13).
- Math 2110H Multi-variable calculus (Fall 2013).
- Math 2120H Vector calculus (Winter 2014).
- Math 2200H Introduction to pure mathematics (Fall 2004, '05, '06, '07).
- Math 2350H Linear algebra II (Winter 2014).
- Math 306H Complex analysis (Winter 2004, Fall 2004).
- Math 310H Metric spaces (Winter 2006, '07).
- Math-Phys 3150H Partial differential equations (Fall 2002, '03,'04,'12,'13).
- Math 320H Number theory (Winter 2008)
- Math 3210H Mathematical cryptography (Winter 2009).
- Math 322 Number theory (two-semester course, Fall-Winter 2005).
- Math 330 Algebra III: Groups, rings and fields (two-semester course, 2002, '03).
- Math 332H Groups and symmetry (Winter 2008).
- Math 3350H Linear programming (Fall 2009).
- Math 3610H Discrete optimization (Fall 2012).
- Math 406H Real analysis and measure theory (Fall 2004, reading course).
- Math 426H Differential geometry (Winter 2006)
- Math 433H Algebraic topology & homological algebra (Winter 2008, reading course).
- Math 4450H Voting, bargaining, and social choice (Winter 2006, '10, '13).
- Math 471H Chaos, symbolic dynamics, and fractals (Fall 2006).
- Math 472H Fractals and complex dynamics (Winter 2007).
- Math 4950H Game theory (Winter 2009).
- AMOD 5610H Foundations of modelling (Fall 2008, '09).
- Cooperative game theory (May-June 2008, 25 lecture hour minicourse, not for credit)

Other teaching

- Math 3363 Introduction to partial differential equations, University of Houston, Fall 2001 and Winter 2002.
- Math 233 Second-year linear algebra, University of Toronto, Winter 2000.

Instructional materials. In 2010, I published Linear Partial Differential Equations and Fourier Theory, a 630 page mathematics textbook, through Cambridge University Press. ¹⁶ I developed this book over several years while teaching a course on partial differential equations at Trent University. Key features of my text are: (1) a strong emphasis on geometric intuition (aided by many figures); (2) A breakdown of the material into many short sections, arranged in a clearly indicated lattice of logical dependencies; and (3) a careful pedagogical development which moves gradually from concrete examples to increasingly abstract cases, eventually arriving at unifying abstract principles which are then exposited in full generality.

I applied the same pedagogical principles while writing packages of lectures notes for several other courses at Trent University (although none of these ever evolved into a complete textbook). These include:¹⁷

¹⁶https://sites.google.com/site/marcuspivato/pde-textbook

¹⁷These materials are available at https://sites.google.com/site/marcuspivato/home/teaching.

- Visual Abstract Algebra, an innovative introduction to the theory of groups, rings, and fields (245 pages, 40 figures).
- Analysis, Measure and Probability: A Visual Introduction (181 pages).
- Voting, Arbitration, and Fair Division, an introduction to social choice theory (227 pages).

Curriculum development at Cergy. Since 2014, I have designed two new courses:

- Microeconomics P1B1 (Introductory microeconomics)¹⁰ is a first-year course in economics designed for a new interdisciplinary engineering program called the International Bachelor Ygrec Data Science by Design,¹⁸ which is offered jointly by CY Cergy Paris Université and EISTI, a nearby engineering school. This ambitious and innovative program attracts a wide range of international students and offers them an intensive education in mathematics, physics, and computer science, as well as three courses in economics, of which mine is one. I based the curriculum for this course on the CORE Economics curriculum,¹⁹ which appealed to me because of its early emphasis on imperfect competition, information asymmetries, externalities, and other sources of market failure, as well as basic game theory and the problems of economic inequality.
- M1 Ethical and economic issues of artificial intelligence¹³ is a course I began teaching in January 2021, as part of a new interdisciplinary Master's program called Political Ideas in a Digital Age.²⁰ This course focuses on two issues. The first is the economic impact of artificial intelligence on labour markets: What will happen when machines become substitutes rather than complements of labour? What is the appropriate policy response? The second issue is philosophical: how can we equip artificially intelligent machines to make ethical decisions? How can the concepts and theories of moral philosophy be adapted to a world where some of the moral actors are machines?

Curriculum development at Trent University. In 2004, I designed Math 2200H (Introduction to Pure Mathematics), a new course to prepare Trent math majors to take advanced courses in the pure mathematics curriculum (e.g. abstract algebra, real analysis, topology). The Math 2200H syllabus begins with basic set theory and proof techniques (modus ponens, induction, contradiction), and then introduces number theory (divisibility, primality, modular arithmetic), combinatorics, transfinite arithmetic, and elementary abstract algebra and topology. I taught Math 2200H in 2004, 2005, 2006, and 2007.

In the summer of 2006, I chaired a committee which implemented major reforms to the mathematics curriculum at Trent University, based mainly upon a draft proposal which I had prepared earlier in 2006. These reforms more efficiently allocated our limited teaching resources, while offering our students a more flexible program and a broader variety of advanced courses. We split, redesigned, rescheduled and renumbered many existing courses, and also created several new courses, including the following ones which I designed:

¹⁸https://www.cyu.fr/international-bachelor-ygrec-data-science-by-design

¹⁹https://www.core-econ.org/

 $^{^{20}}$ https://www.cyu.fr/master-humanites-numeriques-political-ideas-in-a-digital-age-1

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MATH 285H The Mathematics of Art, architecture and music.
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MATH 302H Differential geometry.

MATH 321H Mathematical cryptography.

MATH 433H Homological algebra and algebraic topology.

MATH 435H Modules, multilinear algebra, and linear groups.

MATH 437H Commutative algebra and algebraic geometry.

As part of this initiative, I also designed designed three new undergraduate programs: *Mathematical Economics*, *Mathematical Physics*, and *Mathematical Computer Science*.

Other teaching activities. In November 2007, I delivered a 3-hour presentation on *The mathematics of voting and elections*, to a class of Grade 9 and 10 students from Lindsay Collegiate Secondary School.

In May 2008, I delivered two full-day sessions on *The mathematics of voting and elections*, as part of Trent's *Mini Enrichment* 2008 (for Grade 7 and 8 students).

Participation in graduate student committees and examinations.

- 2023 Rapporteur in the PhD defense jury for Bach Dong Xuan, Université Paris 1 Panthéon-Sorbonne and Paris School of Economics. (Supervisors: Philippe Bich and Bertrand Wigniolle. Thesis title: Essays in Intergenerational Choice and Aggregation of Expert Opinions.)
- 2022 Examinateur in the of PhD defense jury for Tahar Allouche, Université Paris Dauphine. (Supervisors: Jérôme Lang and Florian Yger. Thesis title: Epistemic Approval Voting: Applications to Crowdsourcing Data Labeling.)
- 2021 External Examiner for the PhD viva of Chenxin Pan, Warwick Business School, University of Warwick (Supervisors: Steve Alpern and Bo Chen. Thesis title: *Optimal Voting Order under Sequential Voting Schemes.*)
- 2016 Examinateur in PhD defense jury for Zéphirin Nganmeni, Université de Cergy-Pontoise. (Supervisor: Mathieu Martin. Thesis title: Essais en théorie des jeux et choix social: agrégation des apports non ordonnés, mesure du pouvoir et analyse spatiale.)
- 2012 External committee member for Ph.D. thesis of Arthur Paul Pedersen, Department of Philosophy at Carnegie Mellon University. (Supervisors: Teddy Seidenfeld and Kevin Zollman. Thesis title: *Archimedes Wake*.)
- 2011 External examiner on M.Sc. thesis defense of Andrew Kabbes, Department of Mathematics, Wilfrid Laurier University. (Supervisor: Marc Kilgour. Thesis title: A procedure for fair division of indivisible, identical items with entitlements.)
- 2011-2012 Member of M.Sc. supervisory committee for Sarah Bale, AMINSS,²¹ Trent University. (Supervisor: Raul Ponce-Hernandez. Thesis title: Modelling Agroforestry Alternatives to Slash-and-Burn "Milpa" Agriculture in the Yucatán, Mexico, with WaNuLCAS to generate multiple ecosystem services and enhance rural livelihoods in a changing climate.)

²¹AMINSS = Applications of Modelling in the Natural and Social Sciences.

- 2006 Chair of M.Sc. thesis defense for Michael Jack in the AMINSS graduate program at Trent University. (Supervisor: Brian Patrick. Title: Workload Modeling and Internal Backfilling for Parallel Job Scheduling).
- 2005 External examiner for the Ph.D. defense of Marcelo Sobottka, at the Departamento de Ingeniería Matemática, Universidad de Chile, Santiago. (Supervisors: Alejandro Maass and Servet Martínez. Title: Representación y Aleatorización en sistemas dinámicos de tipo algebraico).

Supervision and training of undergraduate student research projects

- May 1, 2009 to August 31, 2009 Supervised an NSERC USRA²² recipient, Erik Cameron, in a project entitled, Susceptibility to strategic voting in median and mean voting systems.
- May 1, 2008 to August 31, 2008 Supervised an NSERC USRA recipient, Erik Cameron, in a project entitled, *Nomos dynamics and self-selective voting rules*.
- May 1, 2007 to August 31, 2007 Supervised a visiting graduate student from ENS Lyon, Martin Delacourt, in a project entitled, *Emergent Defect Dynamics in 2-dimensional Cellular Automata*. (This resulted in publication [50].)
- May 1, 2006 to August 31, 2006 Supervised a Herzberg Award recipient, Joshua Grant, in a project entitled, *Dynamics of Voting Networks*.
- May 1 to August 31 2004 Supervised an NSERC USRA recipient, Matthew Drescher, in a project entitled, *Emergent Statistical Physics of Particle-Preserving Cellular Automata*.

HDR committees

- 2018 Garantor of HDR for Maria del Carmen Camacho Perez. (Thesis title: Essays on Economic Dynamics: Space, Strategies and the Environment.)
- 2015 Garantor of HDR for Matías Núñez Rodríguez. (Thesis title: Comportement Strategique et Analyse Electorale.)

Other scholarly activities

I am the creator and manager of the Online Social Choice and Welfare Forum, a mailing list and discussion forum for announcements of conferences, seminars, publications, jobs and funding opportunities relevant to the social choice and welfare community.

(https://groups.google.com/g/social-choice-and-welfare-forum)

Seminar Organisation

Since December 2020: Co-organiser of Online Social Choice and Welfare Seminar.²³

2016-2018: Co-organiser of *Theory Group Seminar* at the Université de Cergy-Pontoise.

²²USRA = Undergraduate Summer Research Award.

²³https://sites.google.com/view/2021onlinescwseminars/home?authuser=0

Conference Organisation

- 2023: With Omer Lev, I was Co-Chair of the Program Committee for the 9th International Workshop on Computational Social Choice (COMSOC 2023), which will take place at Ben-Gurion University in Beersheba, Israel, 3-5 July 2023.

 (https://bgu.ac.il/comsoc2023)
 - I organised two sessions (New directions in democracy and Social aggregation of preferences and beliefs) at the SAET (Society for the Advancement of Economic Theory) conference, Paris, 17-22 July 2023. (https://saet.uiowa.edu/2023-conference)
- 2021: With Jean Baccelli, Antoine Billot, Mikaël Cozic and Brian Hill, I organised a three-day conference *Economic Decisions and Social Preferences in honour of Philippe Mongin* at Université Paris Dauphine, 26-28 November 2021. It had twenty-four invited speakers (seventeen of them international) and a budget of about 20 000 €. (https://sites.google.com/view/november21/home)
 - With William Zwicker, I organised a three-day conference Aggregation across disciplines: connections and frameworks at the Maison Internationale de la Recherche (Neuville), 15-17 December 2021. It had twenty-five invited speakers (ten of them international) and a budget of about 19 000 €.

(https://sites.google.com/view/december21/home)

• I organised a session entitled Collective Decisions and Social Welfare at the SAET (Society for the Advancement of Economic Theory) online conference, 13-16 June 2021.

(https://saet.uiowa.edu/conferences/saet2021/)

2019: • With Jean Baccelli, Antoine Billot, Mikaël Cozic and Brian Hill, I organised a two-day Colloque sur l'histoire et la philosophie des théories économiques – autour du travail de Philippe Mongin at Université Paris-II Panthéon-Assas (2-3 December, 2019).

(https://sites.google.com/view/hpte/home)

• I organised a session entitled Social aggregation of information and beliefs at the SAET (Society for the Advancement of Economic Theory) conference, 30 June - 6 July 2019, Ischia, Italy.

(https://saet.uiowa.edu/2019-conference-page)

- I organised a three-day conference entitled *Deliberation*, *Belief Aggregation*, and *Epistemic Democracy II*, at the Maison International de la Recherche (Neuville) from June 11-13, 2019. It had fifteen invited speakers (twelve of them international), more than fifty local participants, and a budget of 21 500 €. (https://sites.google.com/view/dbaed2/home)
- 2018: I organised a three-day conference entitled *Deliberation*, *Belief Aggregation*, and *Epistemic Democracy*, at the École Normale Supérieure from May 30 to June 1, 2018. It had fourteen invited speakers (twelve of them international), more than fifty local participants, and a budget of 25 000 €. (https://sites.google.com/view/dbaed/home)

- 2016: With Alessandra Palmigiano, Tommaso Flaminio, and Elias Tsakas, I organised a five-day conference entitled *Logics, Decisions, and Interactions* at the Lorentz Center in Leiden, Holland (October 24-28, 2016).

 (https://www.lorentzcenter.nl/lc/web/2016/840/info.php3?wsid=840&venue=0ort)
- 2015: I co-organised a one-day conference entitled *Social choice and Uncertainty* at the Université de Cergy-Pontoise.
- 2013: Co-organiser (with Marc Kilgour) of two special sessions at AMMCS-13 conference in Waterloo, Canada (August 26-30, 2013): Social Choice and Games and Decisions.
- 2004: Organised special session 'Cellular Automata and Multidimensional Symbolic Dynamics' at the *Fifth international conference on Dynamical Systems and Differential Equations* (California State Polytechnic University, Pomona, June 16 19, 2004)

Participation in Program Committees of Conferences.

- 2024: Formal Ethics 2024 (University of Greifswald, 15 17 July 2024).
 - Workshop on Social Choice and Learning Algorithms at AAMAS 2024 (Auckland, New Zealand May 6, 2024).
 - 16th Meeting of the Society for Social Choice and Welfare (Paris School of Economics, July 2024).
- 2018: Biases in Science, Munich Center for Mathematical Philosophy, April 10-12, 2019. (http://www.lmu.de/biasesinscience2019)
- 2014: 2014 Meeting of the Association for Public Economic Theory (PET14) in Seattle, Washington (July 11-13, 2014).
- 2013: 2013 Meeting of the Association for Public Economic Theory (PET13) in Lisbon, Portugal (July 5-7, 2013).
- 2011: 17th International Workshop on Cellular Automata and Discrete Complex Systems (AUTOMATA 2011).

Journal Refereeing

- Social Choice and Welfare (25 papers).
- Journal of Economic Theory (9 papers).
- Economics and Philosophy (6 papers).
- Journal of Mathematical Economics (5 papers).
- Econometrica (4 papers).
- Mathematical Social Sciences (4 papers).
- Theory and Decision (4 papers).
- Economic Theory (3 papers).

- Games and Economic Behaviour (2 papers).
- Theoretical Economics (2 papers).
- Revue économique (2 papers).
- Journal of Political Economy.
- American Economic Journal: Microeconomics.
- Journal of Economic Behavior and Organization.
- Review of Economics and Statistics.
- Berkeley Electronic Journal of Theoretical Economics.
- Economica.
- Journal of Public Economic Theory.
- Decisions in Economics and Finance.
- Economics Bulletin.
- Revue d'économie politique.
- Mind (4 papers).
- Synthese (3 papers).
- Episteme (2 papers).
- The Philosophical Review.
- Australasian Journal of Philosophy.
- Utilitas.
- Erkenntnis.
- Journal of Theoretical Politics.
- British Journal of Political Science.
- Artificial Intelligence.
- Journal of Artificial Intelligence Research.
- Journal of Logic and Computation.
- 5th and 9th International Workshops on Computational Social Choice (ComSoc-2014 and ComSoc-2018).
- Theoretical Aspects of Rationality and Knowledge (TARK 19).
- Discrete and Continuous Dynamical Systems A (3 papers).
- Ergodic Theory and Dynamical Systems (2 papers).
- Nonlinearity (2 papers).
- Journal of Cellular Automata (2 papers).
- Proceedings of the London Mathematical Society.
- Discrete Applied Mathematics.
- Topology and its Applications.
- Dynamical Systems.
- Stochastics and Dynamics.
- Journal of Physics A: Mathematical and General.
- Theoretical Informatics and Applications.

Research Grant Refereeing. I have been an external referee for ten research grants:

- One grant proposal for the Independent Research Fund Denmark Humanities (2020).
- One project proposal for a thematic year at the Centre for Advanced Study at the Norwegian Academy of Science and Letters (2016).
- Four NSERC Discovery Grant applications (Canada; 2003, 2004, 2009, 2013).
- Three FONDECYT grant applications (Chile; 2007, 2008, 2008).
- One ECOS-CONICYT grant application (France-Chile; 2011).

External referee for tenure and promotion decisions

- **2018.** Dr. Maria Gallego at the Department of Economics at Wilfrid Laurier University (promotion to Full Professor).
- **2013.** Dr. Kuntal Banerjee at the Department of Economics at Florida Atlantic University (tenure and promotion to Associate Professor).

Math Reviews/Zentralblatt

- (Zbl 1204.91051) Alcantud, José and Mehta, Ghanshyam B. Constructive utility functions on Banach spaces J. Math. Anal. Appl., 350, No. 2, 590–600 (2009).
- (Zbl 1188.37010) Buescu, Jorge. Liapunov stability and the ring of P-adic integers $S\tilde{a}o$ Paulo J. Math. Sci., 2, No. 1, 77–84 (2008).
- (Zbl 1151.91412) Addario-Berry, L.; Reed, B.A. Ballot theorems, old and new. *Horizons of combinatorics*. Bolyai Society Mathematical Studies 17, 9–35 (2008).
- (Zbl 1151.91036) Balinski, Michel. Fair majority voting (or how to eliminate gerrymandering). American Mathematical Monthly, 115, No. 2, 97-113 (2008).
- (Zbl 1169.91008) Tanino, Tetsuzo; Moritani, Atsushi; Tatsumi, Keiji. Coalition formation in convex TU-games based on population monotonicity of random order values. J. Nonlinear Convex Anal. 9, No. 2, 273-281 (2008).
- (Zbl 1147.37009) Boyle, Mike; Lee, Bryant. Jointly periodic points in cellular automata: Computer explorations and conjectures. *Experimental Mathematics* 16 (2007), no.3, 293-302.
- (MR2334506) Biely, Christoly; Dragosits, Klaus; Thurner, Stefan. The prisoner's dilemma on co-evolving networks under perfect rationality. *Phys. D* 228 (2007), no. 1, 40–48.
- (MR2304535) Aragonés, Enriqueta. Government formation in a two dimensional policy space. *Internat. J. Game Theory* 35 (2007), no. 2, 151–184.
- (MR2285112) Aguiar, Manuela A. D.; Dias, Ana Paula. Minimal coupled cell networks. *Nonlinearity* 20 (2007), no. 1, 193–219.
- (MR2260266) Leite, Maria da Conceição A; Golubitsky, Martin. Homogeneous three-cell networks. *Nonlinearity* 19 (2006), no. 10, 2313–2363.
- (MR2237146) Elmhirst, Toby; Golubitsky, Martin. Nilpotent Hopf bifurcations in coupled cell systems. SIAM J. Appl. Dyn. Syst. 5 (2006), no. 2, 205–251
- (MR2151603) Putnam, Ian F. Lifting factor maps to resolving maps. *Israel J. Math.* 146 (2005), 253–280.

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Miscellaneous

2017-2023: Member of the Conseil Scientifique du Labex MME-DII.²⁴

2016-2018: Member of the editorial board for Studia Logica.

2009-2017: Member of the editorial board for the Journal of Cellular Automata.

2008-2016: Member of Working Group 1.5 ($Cellular\ Automata\ and\ Discrete\ Complex\ System 1.5$

tems) of the IFIP (International Federation for Information Processing).

Computer programming. Experience in C, Perl, Lisp, MatLab, Pascal, and Fortran.

Employment history

Professeur des universitésCY Cergy Paris Université 25 09/2014 - 08/2023Associate ProfessorTrent University, Canada07/2002 - 08/2014(except for research leave, 01/2005 - 06/2005 and 07/2010 - 06/2012)Van Vleck Visiting ResearcherWesleyan University, USA01/2005 - 05/2005.Postdoctoral FellowUniversity of Houston, USA08/2001 - 05/2002.

 $^{^{24}} Labex \ MME-DII$ is a research consortium that financially supports research projects at five universities in the Paris region. https://labex-mme-dii.u-cergy.fr/?lang=en

²⁵Formerly known as the Université de Cergy-Pontoise, prior to January 2020.