

Florian Brandl

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Positions

- 2020–2021 **Postdoctoral research scholar**
Department of Economics, Princeton University (Host: Wolfgang Pesendorfer)
- 2019–2020 **Visiting postdoctoral scholar**
Department of Economics, Stanford University (Host: Fuhito Kojima)
- 2018–2019 **Postdoctoral research scholar**
Department of Informatics, Technical University of Munich (Host: Felix Brandt)
- 2013–2018 **Graduate student**
Department of Mathematics, Technical University of Munich

Education

- 2018 **Doctoral degree in Mathematics** (*summa cum laude*)
Department of Mathematics, Technical University of Munich
Thesis title: *Zero-Sum Games in Social Choice and Game Theory*
Thesis committee: Prof. Felix Brandt, Prof. Hervé Moulin, Prof. Clemens Puppe
- 2013 **Master's degree in Mathematics**
Department of Mathematics, Technical University of Munich
Thesis title: *Efficiency and Incentives in Randomized Social Choice*
- 2011 **Bachelor's degree in Mathematics** Department of Mathematics, Technical University of Munich
Thesis title: *Existence of Stability in Hedonic Coalition Formation Games*

Grants

- 2019–2021 **DFG Research Fellowship**

Short-Term Research Visits

- 2018 Department of Computer Science, University of Oxford (Host: Edith Elkind)
- 2016 Department of Computer Science, Carnegie Mellon University (Host: Ariel Procaccia)
- 2016 Department of Economics, Yale University (Host: Dirk Bergemann)
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Journal Articles

13. Arrovian aggregation of convex preferences. *Econometrica*, 88(2):799–844, 2020 (with F. Brandt).
12. Fractional hedonic games. *ACM Transactions on Economics and Computation*, 7(2), 2019 (with H. Aziz, F. Brandt, P. Harrenstein, M. Olsen, and D. Peters).
11. Justifying optimal play via consistency. *Theoretical Economics*, 14:1185–1201, 2019 (with F. Brandt).
10. Strategic abstention based on preference extensions: Positive results and computer-generated impossibilities. *Journal of Artificial Intelligence Research*, 66:1031–1056, 2019 (with F. Brandt, C. Geist, and J. Hofbauer).
9. Welfare maximization entices participation. *Games and Economic Behavior*, 14:308–314, 2019 (with F. Brandt and J. Hofbauer).
8. An axiomatic characterization of the Borda mean rule. *Social Choice and Welfare*, 52(4):685–707, 2019 (with D. Peters).
7. On the tradeoff between efficiency and strategyproofness. *Games and Economic Behavior*, 110:1–18, 2018 (with H. Aziz, F. Brandt, and M. Brill).
6. Proving the incompatibility of efficiency and strategyproofness via SMT solving. *Journal of the ACM*, 65(2), 2018 (with F. Brandt, M. Eberl, and C. Geist).
5. Two problems in max-size popular matchings. *Algorithmica*, 81(7):2738–2764, 2018 (with T. Kavitha).
4. The distribution of optimal strategies in symmetric zero-sum games. *Games and Economic Behavior*, 104:674–680, 2017.
3. Consistent probabilistic social choice. *Econometrica*, 84(5):1839–1880, 2016 (with F. Brandt and H. G. Seedig).
2. The impossibility of extending random dictatorship to weak preferences. *Economics Letters*, 141:44–47, 2016 (with F. Brandt and W. Suksompong).
1. Universal Pareto dominance and welfare for plausible utility functions. *Journal of Mathematical Economics*, 60:123–133, 2015 (with H. Aziz and F. Brandt).

Publications in Peer-Reviewed Conference Proceedings

10. An analytical and experimental comparison of maximal lottery schemes. In *Proceedings of the 27th International Joint Conference on Artificial Intelligence (IJCAI)*, 114–120. IJCAI, 2018 (with F. Brandt and C. Stricker).
9. Popular matchings with multiple partners. In *Proceedings of the 37th IARCS Annual Conference on Foundations of Software Technology and Theoretical Computer Science (FSTTCS)*, Leibniz International Proceedings in Informatics (LIPIcs), 19:1–19:15. LZI, 2018 (with T. Kavitha).
8. Random assignment with optional participation. In *Proceedings of the 16th International Conference on Autonomous Agents and Multiagent Systems (AA-MAS)*, 326–334. IFAAMAS, 2017 (with F. Brandt and J. Hofbauer).

7. Proving the incompatibility of efficiency and strategyproofness via SMT solving. In *Proceedings of the 25th International Joint Conference on Artificial Intelligence (IJCAI)*, 116–122. AAAI Press, 2016 (with F. Brandt and C. Geist).
6. Strategic abstention based on preference extensions: Positive results and computer-generated impossibilities. In *Proceedings of the 24th International Joint Conference on Artificial Intelligence (IJCAI)*, 18–24. AAAI Press, 2015 (with F. Brandt, C. Geist, and J. Hofbauer).
5. Incentives for participation and abstention in probabilistic social choice. In *Proceedings of the 14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, 1411–1419. IFAAMAS, 2015 (with F. Brandt and J. Hofbauer).
4. Fractional hedonic games: Individual and group stability. In *Proceedings of the 14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, 1219–1227. IFAAMAS, 2015 (with F. Brandt and M. Strobel).
3. On the incompatibility of efficiency and strategyproofness in randomized social choice. In *Proceedings of the 28th AAAI Conference on Artificial Intelligence (AAAI)*, 545–551. AAAI Press, 2014 (with H. Aziz and F. Brandt).
2. Universal Pareto dominance and welfare for plausible utility functions. In *Proceedings of the 15th ACM Conference on Economics and Computation (ACM-EC)*, 331–332. ACM Press, 2014 (with H. Aziz and F. Brandt).
1. Existence of stability in hedonic coalition formation games. In *Proceedings of the 11th International Conference on Autonomous Agents and Multiagent Systems (AAMAS)*, 763–770. IFAAMAS, 2012 (with H. Aziz).

Working Papers

5. The vigilant eating rule: A general approach for probabilistic economic design with constraints. 2020 (with H. Aziz).
4. Belief-averaged relative utilitarianism. 2020.
3. Funding public projects: A case for the Nash product rule. 2020 (with F. Brandt, D. Peters, C. Stricker, and W. Suksompong).
2. An analytical and experimental comparison of maximal lottery schemes. 2020 (with F. Brandt and C. Stricker).
1. Simple characterizations of approval voting. 2019 (with D. Peters).

Selected Talks

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| 2020 | “Arrovian Aggregation of Convex Preferences”, Department of Economics, Princeton University |
| 2019 | “Simple Characterizations of Approval Voting”, Dagstuhl Seminar for Application-Oriented Computational Social Choice |
| 2019 | “Justifying Optimal Play via Consistency”, Department of Economics, Stanford University |

- 2018 “An Analytical and Experimental Comparison of Maximal Lottery Schemes”, 14th Meeting of the Society for Social Choice and Welfare (SSCW), 2018
- 2018 “Optimal Play Without Common Priors”, Department of Computer Science, University of Oxford
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Referring Journals

ACM Transactions on Economics and Computation (TEAC), Algorithmica (ALGO), Econometrica (ECMA), Games and Economic Behavior (GEB), International Journal of Game Theory (IJGT), Journal of Artificial Intelligence Research (JAIR), Journal of Economic Theory (JET), Mathematical Social Sciences (MSS), Mathematics of Operations Research (MOR), Operations Research (OR), Social Choice and Welfare (SCW), Theoretical Economics (TE)

Program Committee Memberships

21st ACM Conference on Economics and Computation (ACM-EC), 2020, 27th International Joint Conference on Artificial Intelligence (IJCAI), 2018, 26th International Joint Conference on Artificial Intelligence (IJCAI), 2017, 25th International Joint Conference on Artificial Intelligence (IJCAI), 2016

Referring Conferences

27th International Joint Conference on Artificial Intelligence (IJCAI), 2018, 11th International Symposium on Algorithmic Game Theory (SAGT), 2018, 26th International Joint Conference on Artificial Intelligence (IJCAI), 2017, 15th International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2016, 6th International Workshop on Computational Social Choice (COMSOSC), 2016, 25th International Joint Conference on Artificial Intelligence (IJCAI), 2016, 14th International Conference on Autonomous Agents and Multiagent Systems (AAMAS), 2015, 4th International Conference on Algorithmic Decision Theory (ADT), 2015, 6th Workshop on Cooperative Games in Multiagent Systems (COOPMAS), 2015, 15th ACM Conference on Economics and Computation (ACM-EC), 2014

Teaching

- 2017–2018 Seminar “Markets, Algorithms, Incentives, and Networks”
- 2016 Course “Algorithmic Game Theory” (Teaching assistant)
- 2015 Seminar “Computational Social Choice”
- 2014–2018 Seminar “Economics and Computation”
- 2013–2019 Course “Computational Social Choice” (Teaching assistant)
- 2014–2019 Supervision of 7 Bachelor and Master theses