Curriculum Vitae PIOTR FALISZEWSKI Januray 23rd, 2020

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RESEARCH AREAS

Computational social choice; preference aggregation; (parametrized) complexity of elections; cooperative game theory; algorithms and complexity, approximation algorithms. I am particularly interested in ideas, concepts, and research spanning and linking all these areas.

PERSONAL

Polish Citizen; Born 11/07/1980 in Kraków, Poland; single.

REFERENCES

Available upon request.

EDUCATION

• AGH University of Science and Technology

Habilitation in Computer Science, granted on July 11th, 2013. Single-topic collection of papers: Algorithmic Tools for Elections

• University of Rochester

Ph.D. in Computer Science, 2004–2008, advisor: Professor Lane A. Hemaspaandra Thesis title: Manipulation of Elections: Algorithms and Infeasibility Results M.S. in Computer Science, 2004–2006.

• AGH University of Science and Technology, Kraków, Poland 5-year B.S./M.S. in Computer Science, 1999–2004.

ACADEMIC EXPERIENCE

- AGH University of Science and Technology, Kraków, Poland Associate Professor at the Department of Computer Science (November 1st, 2015–present) Assistant Professor at the Department of Computer Science (January 1st, 2009–October 31st, 2015)
- Université Paris-Dauphine, Paris, France Visiting Professor (one month in the academic year 2015-2016)

- Technische Universität Berlin, Berlin, Germany Mercator Fellow (six months in 2013–2014) Visiting professor (Friedrich Wilhelm Bessel Research Award, Alexander von Humboldt Foundation; 10 months between 2018 and 2020)
- Rochester Institute of Technology, Rochester, NY 14623, USA Adjunct at the Department of Computer Science, 6/2005-8/2005, 6/2006-8/2006, 6/2007-8/2007, 6/2008-8/2008.
- University of Rochester, Rochester, NY 14627, USA Teaching Assistant at the Department of Computer Science, 1/2005–5/2005, 9/2005– 12/2005, 1/2006–5/2006, and 9/2006–12/2006.
- AGH University of Science and Technology, Kraków, Poland Teaching Assistant at the Department of Computer Science, 10/2003-8/2004. Research Assistant at the Department of Computer Science, 10/2003-8/2004.
- ACC Cyfronet Student Internship; worked on the CrossGrid Project, Summer 2002.
- Technion Israel Institute of Technology Took part in the SciTech '97 Student Research program, Summer 1997.

PHD STUDENTS

- dr Piotr Skowron, University of Warsaw; defense April 2nd, 2015 (confirmed April 23rd, 2015); graduated with distinction; runner up for the 2015 IFAAMAS Victor Lesser Distinguished Dissertation Award.
- dr Marcin Waniek, University of Warsaw; defense June 29th, 2017.
- Krzysztof Magiera, AGH University of Science and Technology.
- Stanisław Szufa, Jagiellonian University.
- Paweł Batko
- Grzegorz Gawron

ACADEMIC SERVICE

- Member of Poland's Council for Research Excellence (*pol.* Rada Doskonałości Naukowej).
- Program Committee (co)chair:
 - 1. The 41st International Symposium on Mathematical Foundations of Computer Science (MFCS), Kraków, August 2016 (also local organizer);
 - Workshop on Challenges in Algorithmic Social Choice (Bad Belzig, Germany, October 8–11, 2014);
 - 3. The 4th International Workshop on Computational Social Choice (COMSOC-2012); (also local organizer).
- Tutorial (co)chair:
 - 1. Eighteenth International Conference on Autonomous Agents and MultiAgent Systems (AAMAS-2019).

- Member of the steering committee of the International Workshop on Computational Social Choice (COMSOC) for the period September 2012–June 2016.
- Management Committee representative for Poland in COST action IC1205.
- Invited talks/tutorials:
 - 30th European Conference on Operational Research, EURO-K (Dublin, Ireland, June 23–26, 2019),
 - 6th German Day on Computational Game Theory (Potsdam, Germany, February 10–11, 2019),
 - Recent Advances in Parametrized Complexity (invited tutorial on computational social choice; Tel Aviv, Israel, December 3–7, 2017),
 - 4th Workshop on Cloud Services for Synchronisation and Sharing (CS3, Kraków, Poland, January 29–31, 2018),
 - 4th International Conference on Behavioral, Economic, and Socio-Cultural Computing (BESC 2017, Kraków, Poland),
 - PhD Open course at the University of Warsaw (October 12-14, 2017, Warsaw, Poland),
 - IJCAI 2017: Early Career Spotlights (August 2017, Melbourne, Australia),
 - COST IC1205 Workshop (Sibiu, Romania, 2014),
 - Warsaw Workshop on Economic and Computational Aspects of Game Theory and Social Choice (ECAGS-2014, Warsaw, Poland),
 - Logic, Games, and Social Choice (LGS-2011, Bucharest, Romania),
 - Parallel Problem Solving from Nature (PPSN-2010, Kraków, Poland).
- Area Chair: Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI-2020), Nineteenth International Conference on Autonomous Agents and MultiAgent Systems (AAMAS-2020).
- Senior Program Committee member: Twelfth International Symposium on Algorithmic Game Theory (SAGT-2019), Sixth International Conference on Algorithmic Decision Theory (ADT-2019), Twenty-Eights International Joint Conference on Artificial Intelligence (IJCAI-2019), Eighteenth International Conference on Autonomous Agents and MultiAgent Systems (AAMAS-2019), Thirty-Third AAAI Conference on Artificial Intelligence (AAAI-2019), Twenty-Seventh International Joint Conference on Artificial Intelligence (IJCAI-2018), Twenty-Sixth International Joint Conference on Artificial Intelligence (IJCAI-2017), Twenty-Fifth International Joint Conference on Artificial Intelligence (IJCAI-2016), Twenty-Fourth International Joint Conference on Artificial Intelligence (IJCAI-2016), Twenty-Fourth International Conference on Artificial Intelligence (IJCAI-2015), Fourteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2015), Twenty-Third International Joint Conference on Artificial Intelligence (IJCAI-2013), Eleventh International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2012).
- **Program Committee member:** Nineteenth ACM Conference on Economics and Computation (EC-2018), Seventeenth International Conference on Autonomous

Agents and Multiagent Systems (AAMAS-2018), Thirty-Second AAAI Conference on Artificial Intelligence (AAAI-2018), Eighteenth ACM Conference on Economics and Computation (EC-2017), Sixteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2017), Thirty-First AAAI Conference on Artificial Intelligence (AAAI-2017), Thirtieth AAAI Conference on Artificial Intelligence (AAAI-2016), Fifteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2016), Sixth International Workshop on Computational Social Choice (COMSOC-2016), Twenty-Second European Conference on Artificial Intelligence (ECAI-2016), Seventh Workshop on Cooperative Games in Multiagent Systems (CoopMAS-2016), Fourth International Conference on Algorithmic Decision Theory (ADT-2015), Twenty-Ninth AAAI Conference on Artificial Intelligence (AAAI-2015), Sixth Workshop on Cooperative Games in Multiagent Systems (CoopMAS-2015), The Second Workshop on Exploring Beyond the Worst Case in Computational Social Choice (Explore-2015), Fourteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2015), Seventh European Starting AI Researcher Symposium (STAIRS-2014), Fifteenth ACM Conference on Economics and Computation (EC-2014), Twenty-First European Conference on Artificial Intelligence (ECAI-2014), Fifth International Workshop on Computational Social Choice (COMSOC-2014), Fifth Workshop on Cooperative Games in Multiagent Systems (CoopMAS-2014), Tenth Spain-Italy-Netherlands Meeting on Game Theory (SING-2014), Twenty-Eighth AAAI Conference on Artificial Intelligence (AAAI-2014), Thirteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2014), Twenty-Seventh AAAI Conference on Artificial Intelligence (AAAI-2013), Fourth Workshop on Cooperative Games in Multiagent Systems (CoopMAS-2013), Twelfth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2013), Fifth International Symposium on Algorithmic Game Theory (SAGT-2012), Twentieth European Conference on Artificial Intelligence (ECAI-2012), Twenty-Sixth AAAI Conference on Artificial Intelligence (AAAI-2012), Third Workshop on Cooperative Games in Multiagent Systems (CoopMAS-2012), IJCAI-2011 Workshop on Social Choice and Artificial Intelligence (WSCAI-2011), Second Workshop on Cooperative Games in Multiagent Systems (CoopMAS-2011), Twenty-Fifth AAAI Conference on Artificial Intelligence (AAAI-2011), Tenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2011), Twenty-Fourth AAAI Conference on Artificial Intelligence (AAAI-2010), Ninth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-2010), Third International Workshop on Computational Social Choice (COMSOC-2010), First Workshop on Cooperative Games in Multiagent Systems (CoopMAS-2010).

- Associate editor: Journal of Artificial Intelligence Research (2017–).
- Guest handling editor: Computing and Informatics.
- Referee for journals: Games and Economic Behaviour, ACM Transactions on Algorithms, Information and Computation, Theoretical Computer Science, Theory of Computing Systems, Information Processing Letters, Journal of Artificial Intelligence Research, Journal of Mathematical Economics, Artificial Intelligence, Journal of

Autonomous Agents and Multiagent Systems, Annals of Mathematics and Artificial Intelligence, Social Choice and Welfare, Neurocomputing, Discrete Applied Mathematics, Discrete Optimization, Mathematical Social Sciences, Mathematical Logic Quarterly, European Journal of Operations Research, Operations Research and Decisions, Electronic Commerce Research and Applications, Computing and Informatics, Journal of Universal Computer Science, International Journal of Foundations of Computer Science. International Journal of Applied Mathematics and Computer Science

- Referee for conferences: MFCS-19, STACS-17, WINE-15, SAGT-15, SODA-14, FOCS-14, FOCS-12, MFCS-12, TAMC-12, WINE-11, IJCAI-11, WINE-10, IPEC-10, MFCS-10, MFCS-09, IJCAI-09, AAMAS-09, AAAI-08, ICALP 08, AAMAS-08, AAAI-07, STACS-07, ICALP-06, ACM-EC-06, MFCS-06, MFCS-05.
- Referee for workshops: COMSOC-08, NESCAI-08.

HONORS

- Distinguished SPC member at IJCAI-2019.
- Paper Approximation Algorithms for BalancedCC Multiwinner Rules (joint work with Markus Brill, Frank Sommer, Nimrod Talmon) nominated for the best paper award at th AAMAS-2019 conference.
- Recipient of the **Friedrich Wilhelm Bessel Research Award** of the Alexander von Humboldt Foundation (2018).
- Winner of the "2013 Research Prize" of "Polityka" magazine (in the field of technical sciences").
- Mercator Fellow with Prof. Rolf Niedermeier at the Technische Universität Berlin (2013–2014).
- Paper Weighted Electoral Control (joint work with Edith Hemaspaandra and Lane A. Hemaspaandra) nominated for the best paper award at th AAMAS-2013 conference.
- Nominated by the Department of Computer Science of the University of Rochester for a Outstanding Dissertation Award (2008).
- Nominated for the University of Rochester's Edward Peck Curtis Award for Excellence in Teaching by Graduate Students (2007).
- AGH University of Science and Technology Rector's Award (2001).
- Member of the AGH University of Science and Technology team at the ACM Central European Programming Contest 2001 (ranked 19/60), and at the Polish Academic Programming Contest 2001 (ranked 18/45).
- Best presentation at SciTech'97 in the area of engineering (1997).

FUNDING

• Principal investigator on the National Center for Science (NCN) Opus grant 2016/21/B/ST6/01509 (Spring 2017–Spring 2020).

- Principal investigator on the National Center for Science (NCN) Harmonia grant 2012/06/M/ST1/00358 (Spring 2013–Spring 2016).
- An investigator on the National Center for Science (NCN) Opus grant 2011/03/B/ST6/01393 (three years, starting in the Fall 2012).
- Stipend for young PhD's thgrough EU's program: Program Operacyjny Kapitał Ludzki at AGH University of Science and Technology in Kraków, Poland (January 2011 through December 2011).
- Recipient of the Foundation for Polish Science's Powroty/Homing research award (two years, starting in the Fall 2009 + one year extension).
- Primary investigator on the Polish Ministry of Science and Higher Education Research grant N-N206-378637 (two years, starting in the Fall 2009).

COURSES TAUGHT

- Algorithmic Game Theory, AGH University of Science and Technology. Instructor, completely responsible for the course (90 minutes a week). Fall 2013, 2014, 2015, 2016, 2017, 2018.
- Combinatorial Computing (MATHS-326), University of Auckland, New Zealand. Coinstructor (200 minutes a week, 4 weeks). Spring 2010.
- Theory of Computation and Computational Complexity I, AGH University of Science and Technology. Instructor, completely responsible for the course (90 minutes a week). Fall 2009, 2010, 2011, 2012, 2013, 2014, 2015, 2016, 2017, 2018, 2019.
- Algorithms for Computationally Hard Problems, AGH University of Science and Technology. Instructor, completely responsible for the course (90 minutes a week). Spring 2015, 2016, 2017, 2018, 2019.
- Theory of Computation and Computational Complexity II, AGH University of Science and Technology. Instructor, completely responsible for the course (90 minutes a week). Spring 2010, 2011, 2012, 2013, 2014.
- Algorithms and Data Structures, AGH University of Science and Technology. Instructor, completely responsible for the course (Spring 2013, 2014, 2015, 2016, 2017, 2018, 2019; 90 minutes a week, 15 weeks).
- Algorithms and Data Structures, AGH University of Science and Technology. Instructor, compulsory recitation sessions (Spring 2009, 2010, 2011, 2012; 90 minutes a week, 15 weeks).
- Introduction to Computer Science Theory, Rochester Institute of Technology. Instructor, completely responsible for the course (Summer 2008, 240 minutes a week, 10 weeks).
- Cryptography 1, Rochester Institute of Technology. Instructor, completely responsible for the course (Summer 2008, 240 minutes a week, 10 weeks), (Summer 2007, 240 minutes a week, 10 weeks).
- Programming Language Concepts, Rochester Institute of Technology. Instructor, completely responsible for the course (Summer 2007, 240 minutes a week, 10 weeks).

- Computer Networks and Data Communication 1, Rochester Institute of Technology. Instructor, completely responsible for the course (Summer 2007, 480 minutes a week, 5 weeks), (Summer 2006, 240 minutes a week, 10 weeks), (Summer 2005, 480 minutes a week, 5 weeks).
- Computational Complexity, University of Rochester. Teaching Assistant. Fall 2006, Fall 2005.
- Operating Systems 1, Rochester Institute of Technology. Instructor, completely responsible for the course (Summer 2006, 240 minutes a week, 10 weeks), (Summer 2005, 480 minutes a week, 5 weeks).
- Computer Models & Limitations, University of Rochester. Teaching Assistant and Recitation Leader (75 minutes a week). Spring 2006, Spring 2005.
- Theory of Computation, AGH University of Technology. Instructor, completely responsible for the course. Spring 2004.
- Theory of Computation and Computational Complexity I, AGH University of Science and Technology. Recitation Leader (90 minutes a week). Spring 2004.
- Theory of Computation and Computational Complexity II, AGH University of Science and Technology. Teaching Assistant. Fall 2003.
- Symbolic Programming II, AGH University of Science and Technology. Recitation Leader (Spring 2009, 90 minutes a week), (Fall 2003, 90 minutes a week).

LIST OF PUBLICATIONS

REFEREED JOURNAL PUBLICATIONS

- Mixed Integer Programming with Convex/Concave Constraints: Fixed-Parameter Tractability and Applications to Multicovering and Voting, R. Bredereck, P. Faliszewski, R. Niedermeier, P. Skowron and N. Talmon. *Theoretical Computer Science*, accepted.
- A Characterization of the Single-Peaked Single-Crossing Domain, E. Elkind, P. Faliszewski, P. Skowron. Social Choice and Welfare, accepted.
- Recognizing Top-Monotonic Preference Profiles in Polynomial Time, K. Magiera, P. Faliszewski. Journal of Artificial Intelligence Research, Vol. 66, pp. 57–84, 2019.
- 4. Algorithms for Destructive Shift Bribery, A. Kaczmarczyk, P. Faliszewski, Autonomous Agents and Multi-Agent Systems, Vol. 33(3), pp. 275-297, 2019.
- Committee Scoring Rules: Axiomatic Characterization and Hierarchy, P. Faliszewski, P. Skowron, A. Slinko, N. Talmon, ACM Transactions on Economics and Computation, Vol. 7(1), pp. 3:1-3:39, 2019.
- Axiomatic Characterization of Committee Scoring Rules, P. Skowron, P. Faliszewski, A. Slinko, *Journal of Economic Theory*, Vol. 180, pp. 244-273, 2019.
- Achieving Fully Proportional Representation by Clustering Voters, P. Faliszewski, A. Slinko, K. Stahl, N. Talmon, *Journal of Heuristics*, Vol. 24(5), pp. 725–756, 2018.
- Multiwinner Analogues of the Plurality Rule: Axiomatic and Algorithmic Views, P. Faliszewski, P. Skowron, A. Slinko, N. Talmon, *Sociel Choice and Welfare*, Vol. 51(3), pp. 513–550, 2018.
- Elections with Few Voters: Candidate Control Can Be Easy, J. Chen, P. Faliszewski, R. Niedermeier, N. Talmon, *Journal of Artificial Intelligence Research*, Vol. 60, pp. 937–1002, 2017.
- Chamberlin-Courant Rule with Approval Ballots: Approximating the MaxCover Problem with Bounded Frequencies in FPT Time, P. Skowron, P. Faliszewski, *Journal* of Artificial Intelligence Research, Vol. 60, pp. 687–716, 2017.
- 11. How Hard is Control in Single-Crossing Elections?, K. Magiera, P. Faliszewski, Autonomous Agents and Multiagent Systems, Vol. 31(3), pp. 606–627, 2017.
- Multiwinner Voting in Genetic Algorithms, P. Faliszewski, J. Sawicki, R. Schaefer, M. Smołka, *IEEE Intelligent Systems*, Vol. 32(1), pp. 40–48, 2017.
- Properties of Multiwinner Voting Rules, E. Elkind, P. Faliszewski, P. Skowron, A. Slinko, Sociel Choice and Welfare, Vol. 48(3), pp. 599–632, 2017.
- Campaign Management under Approval-Driven Voting Rules, I. Schlotter, E. Elkind, P. Faliszewski, *Algorithmica*, Vol. 77(1), pp. 84–115, 2017.

- Prices Matter for the Parameterized Complexity of Shift Bribery, R. Bredereck, J. Chen, P. Faliszewski, A. Nichterlein, R. Niedermeier, *Information and Computation*, Vol. 251, pp. 140–164, 2016.
- Finding a Collective Set of Items: From Proportional Multirepresentation to Group Recommendation, P. Skowron, P. Faliszewski, J. Lang, *Artificial Intelligence*, Vol. 241, pp. 191–216, 2016.
- The Complexity of Priced Control in Elections, T. Miąsko, P. Faliszewski, Annals of Mathematics and Artificial Intelligence, Vol. 77(3-4), pp. 225–250, 2016.
- The Complexity of Voter Control and Shift Bribery Under Parliament Choosing Rules, T. Put, P. Faliszewski, *Transactions on Computational Collective Intelligence*, Vol. 23, pp. 29–50, 2016.
- Large-Scale Election Campaigns: Combinatorial Shift Bribery, R. Bredereck, P. Faliszewski, R. Niedermeier, N. Talmon, *Journal of Artificial Intelligence Research*, Vol. 55, pp. 603–652, 2016.
- On the Computational Cost and Complexity of Stochastic Inverse Solvers, P. Faliszewski, M. Smolka, R. Schaefer, M. Paszynski, *Computer Science*, Vol. 17(2), pp. 225-264, 2016.
- Distance Rationalization of Voting Rules, E. Elkind, P. Faliszewski, A. Slinko, Social Choice and Welfare, Vol. 45(2), pp. 345–377, 2015.
- Complexity of Manipulation, Bribery, and Campaign Management in Bucklin and Fallback Voting, P. Faliszewski, Y. Reisch, J. Rothe, L. Schend, Autonomous Agents and Multiagent Systems, Vol. 29(6), pp. 1091–1124, 2015.
- Combinatorial Voter Control in Elections, L. Bulteau, J. Chen, P. Faliszewski, R. Niedermeier, N. Talmon, *Theoretical Computer Science*, Vol. 589, pp. 99–120, 2015.
- 24. Weighted Electoral Control, P. Faliszewski, E. Hemaspaandra, L. Hemaspaandra, *Journal of Artificial Intelligence Research*, Vol. 52, pp. 507–542, 2015.
- Achieving Fully Proportional Representation: Approximability Results, P. Skowron, P. Faliszewski, A. Slinko, Artificial Intelligence, Vol. 222, pp. 67–103, 2015.
- The Complexity of Fully Proportional Representation for Single-Crossing Electorates, P. Skowron, L. Yu, P. Faliszewski, and E. Elkind, *Theoretical Computer Science*, Vol. 569, pp. 43–57, 2015.
- Parameterized Algorithmics for Computational Social Choice: Nine Research Challenges, R. Bredereck, J. Chen, P. Faliszewski, J. Guo, R. Niedermeier, G. Woeginger, *Tsinghua Science and Technology*, Vol. 19(4), pp. 358–373, 2014.
- The Complexity of Manipulative Attacks in Nearly Single-Peaked Electorates, P. Faliszewski, E. Hemaspaandra, L.A. Hemaspaandra, Artificial Intelligence, Vol. 207, pp. 69–99, 2014.
- Manipulating the Quota in Weighted Voting Games, M. Zuckerman, P. Faliszewski, Y. Bachrach, E. Elkind, Artificial Intelligence, Vol. 180–181, pp. 1–19, 2012.

- Rationalizations of Condorcet-Consistent Rules via Distances of Hamming Type,
 E. Elkind, P. Faliszewski, A. Slinko, Social Choice & Welfare, Vol. 39, #4, pp. 891–905, 2012.
- Cloning in Elections: Finding the Possible Winners, E. Elkind, P. Faliszewski, A. Slinko, Journal of AI Research, Vol. 42, pp. 529–573, 2011.
- The Shield that Never Was: Societies with Single-Peaked Preferences are More Open to Manipulation and Control, P. Faliszewski, E. Hemaspaandra, L.A. Hemaspaandra, and J. Rothe, *Information and Computation*, Vol. 209, #2, pp. 89–107, 2011.
- 33. Multimode Control Attacks on Elections, P. Faliszewski, E. Hemaspaandra, and L.A. Hemaspaandra, *Journal of AI Research*, Vol. 40, pp. 305–351, 2011.
- AI's War on Manipulation: Are We Winning?, P. Faliszewski and A. Procaccia, AI Magazine, Vol. 31, #4, pp. 53–64, 2010.
- Using Complexity to Protect Elections, P. Faliszewski, E. Hemaspaandra, and L. Hemaspaandra, Communications of the ACM, Vol. 53, #11, pp. 74–82, 2010.
- 36. On the Autoreducibility of Functions, P. Faliszewski and M. Ogihara, *Theory of Computing Systems*, Vol. 46, #2, pp. 222–245, 2010.
- Llull and Copeland Voting Computationally Resist Bribery and Constructive Control, P. Faliszewski, E. Hemaspaandra, L. Hemaspaandra, and J. Rothe, *Journal of AI Research*, Vol. 35, pp. 275–341, 2009.
- How Hard is Bribery in Elections?, P. Faliszewski, E. Hemaspaandra, and L. Hemaspaandra, Journal of AI Research, Vol. 35, pp. 485–532, 2009.
- The Complexity of Power-Index Comparison, P. Faliszewski and L. Hemaspaandra, Theoretical Computer Science, Vol. 410, #1, pp. 101–107, 2009.
- The Consequences of Eliminating NP Solutions, P. Faliszewski and L. Hemaspaandra, Computer Science Review, Vol. 2, #1, pp. 40–54, 2008.
- Properties of Uniformly Hard Languages, P. Faliszewski and J. Jarosz, Information Processing Letters, Vol. 95, #1, pp. 329–332, 2005.
- Advice for Semifeasible Sets and the Complexity-Theoretic Cost(lessness) of Algebraic Properties, P. Faliszewski and L. Hemaspaandra, International Journal of Foundations of Computer Science, Vol. 16, #5, pp. 913–928, 2005.

ADDITIONAL JOURNAL PUBLICATIONS

43. Open Questions in the Theory of Semifeasible Computation, P. Faliszewski and L. Hemaspaandra, SIGACT News 37(1), pp. 47–65, March 2006.

BOOK CHAPTERS

- Multiwinner Voting: A New Challenge for Social Choice Theory, P. Faliszewski, P. Skowron, A. Slinko, N. Talmon, in *Trends in Computational Social Choice*, ed. Ulle Endriss, AI Access Foundation, 2017.
- Control and Bribery in Voting, P. Faliszewski, J. Rothe, in *Handbook of Computational Social Choice*, eds. F. Brandt, V. Conitzer, U. Endriss, J. Lang, A. Procaccia, Cambridge University Press, 2016.
- 46. Noncooperative Game Theory, P. Faliszewski, I. Rothe, J. Rothe, in *Economics and Computation: An Introduction to Algorithmic Game Theory, Computational Social Choice, and Fair Division*, ed. J. Rothe, Springer, 2016.
- 47. A Richer Understanding of the Complexity of Election Systems, P. Faliszewski, E, Hemaspaandra, L. Hemaspaandra, and J. Rothe, in *Fundamental Problems in Computing: Essays in Honor of Professor Daniel J. Rosenkrantz*, eds. S. Ravi and S. Shukla, pp. 375–406, Springer, 2009.

CONFERENCE PAPERS

- 48. Drawing a Map of Elections in the Space of Statistical Cultures, S. Szufa, P. Faliszewski, P. Skowron, A. Slinko, N. Talmon, In Proceedings of the Nineteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-20), accepted.
- Algorithms for Swap and Shift Bribery in Structured Elections, E. Elkind, P. Faliszewski, S. Gupta, S. Roy, In Proceedings of the Nineteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-20), accepted.
- 50. Multiwinner Rules with Variable Number of Winners, P. Faliszewski, A. Slinko, N. Talmon, In Proceedings of the Twenty-Fourth European Conference on Artificial Intelligence Nineteenth International Conference on Autonomous Agents and Multiagent Systems (ECAI-20), accepted.
- 51. Parameterized Algorithms for Finding a Collective Set of Items, R. Bredereck, P. Faliszewski, A. Kaczmarczyk, D. Knop, R. Niedermeier. In Proceedings of the Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI-20), accepted.
- 52. On Swap Convexity of Voting Rules, S. Obraztsova, E. Elkind, P. Faliszewski. In Proceedings of the Thirty-Fourth AAAI Conference on Artificial Intelligence (AAAI-20), accepted.
- Multigoal Committee Selection, M. Kocot, A. Kolonko, E. Elkind, P. Faliszewski, N. Talmon, In Proceedings of the Twenty-Eighth International Joint Conference on Artificial Intelligence (IJCAI-19), pp. 385–391, August 2019.
- An Experimental View on Committees Providing Justified Representation, R. Bredereck, P. Faliszewski, A. Kaczmarczyk, R. Niedermeier, In Proceedings of the Twenty-Eighth International Joint Conference on Artificial Intelligence (IJCAI-19), pp. 109–115, August 2019.
- 55. Approximation Algorithms for BalancedCC Multiwinner Rules, M. Brill, P. Faliszewski, F. Sommer, N. Talmon, In Proceedings of the Eighteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-19), pp. 494–502, May 2019.

- 56. Proportional Representation in Elections: STV vs PAV, P. Faliszewski, P. Skowron, S. Szufa, N. Talmon In Proceedings of the Eighteenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-19), pp. 1946–1948, May 2019. (Best paper award nomination.)
- A Framework for Approval-based Budgeting Methods, P. Faliszewski, N. Talmon In Proceedings of the Thirty-Third AAAI Conference on Artificial Intelligence (AAAI-19), pp. 2181–2188, January–February 2019.
- How Similar Are Two Elections?, P. Faliszewski, P. Skowron, A. Slinko, S. Szufa, N. Talmon, In Proceedings of the Thirty-Third AAAI Conference on Artificial Intelligence (AAAI-19), pp. 1909–1916, January–February 2019.
- Approximation and Hardness of Shift-Briber, P. Faliszewski, P. Manurangsi, K. Sornat, In Proceedings of the Thirty-Third AAAI Conference on Artificial Intelligence (AAAI-19), pp. 1901–1908, January–February 2019.
- Egalitarian Committee Scoring Rules, H. Aziz, P. Faliszewski, B. Grofman, A. Slinko, N. Talmon, In Proceedings of the Twenty-Seventh International Joint Conference on Artificial Intelligence (IJCAI-ECAI-18), pp. 56–62, July 2018.
- Opinion Diffusion and Campaigning on Society Graphs, P. Faliszewski, R. Gonen, M. Koutecky, N. Talmon, In Proceedings of the Twenty-Seventh International Joint Conference on Artificial Intelligence (IJCAI-ECAI-18), pp. 219–225, July 2018.
- 62. Optimization-Based Voting Rule Design: The Closer to Utopia the Better, P. Faliszewski, S. Szufa, N. Talmon, In Proceedings of the Seventeenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-18), pp. 32–40, July 2018.
- 63. Between Proportionality and Diversity: Balancing District Sizes under the Chamberlin–Courant Rule, P. Faliszewski, N. Talmon, In Proceedings of the Seventeenth International Conference on Autonomous Agents and Multiagent Systems (AAMAS-18), pp. 14–22, July 2018.
- Effective Heuristics for Committee Scoring Rules, P. Faliszewski, M. Lackner, D. Peters, N. Talmon, In Proceedings of the Thirty-Second AAAI Conference on Artificial Intelligence (AAAI-18), pp. 1023–1030, February 2018.
- Multiwinner Elections with Diversity Constraints, R. Bredereck, P. Faliszewski, A. Igarashi, M. Lackner, P. Skowron, In Proceedings of the Thirty-Second AAAI Conference on Artificial Intelligence (AAAI-18), pp. 933–940, February 2018.
- 66. How to Choose a Committee Based on Agents' Preferences, P. Faliszewski, In Proceedings of the 4th International Conference on Behavioral, Economic, and Socio-Cultural Computing (BESC-17), *(invited talk)*, to appear.
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