

Johannes Brüstle

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ACADEMIC POSITIONS

Fixed-Term Assistant Professor (RTDA) , Sapienza University of Rome	May 2025 – May 2028
Postdoctoral Researcher , Sapienza University of Rome	May 2024 – May 2025

EDUCATION

PhD in Mathematics, London School of Economics Advisors: Paul Dütting and László Vég	2020 – 2024
MSc in Computer Science, McGill University Advisors: Yang Cai and Adrian Vetta	Sept. 2017 – Dec. 2019
BSc in Joint Honours Mathematics and Computer Science, McGill University	Sept. 2013 – May 2017

RESEARCH INTERESTS

Algorithmic game theory; mechanism design; posted-price mechanisms; prophet inequalities; online optimization; algorithms with predictions; contract theory; computational social choice; theoretical foundations of machine learning and AI-mediated markets.

PUBLICATIONS AND MANUSCRIPTS

Journal publications and refereed conference papers

- **The Panel Complexity of Sortition: Is 12 Angry Men Enough?**
Johannes Brüstle, Simone Fioravanti, Tomasz Ponitka, Jeremy Vollen
Advances in Neural Information Processing Systems (NeurIPS) 2026.
- **Splitting Guarantees for Prophet Inequalities via Nonlinear Systems**
Johannes Brüstle, Sebastian Perez-Salazar, Victor Verdugo
Mathematics of Operations Research, Articles in Advance, 2025; WINE 2024.
- **The Competition Complexity of Prophet Inequalities**
Johannes Brüstle, José Correa, Paul Dütting, Tomer Ezra, Michal Feldman, Victor Verdugo
Mathematics of Operations Research, published online 2025; EC 2024.
- **The Competition Complexity of Dynamic Pricing**
Johannes Brüstle, José Correa, Paul Dütting, Victor Verdugo
Mathematics of Operations Research 49(3):1986–2008; EC 2022.
- **Price Manipulability in First-Price Auctions**
Johannes Brüstle, Paul Dütting, Balasubramanian Sivan
The ACM Web Conference, WWW 2022.
- **Multi-Item Mechanisms without Item-Independence: Learnability via Robustness**
Johannes Brüstle, Yang Cai, Constantinos Daskalakis
ACM Conference on Economics and Computation, EC 2020.
- **One Dollar Each Eliminates Envy**
Johannes Brüstle, Jack Dippel, Vishnu V. Narayan, Mashbat Suzuki, Adrian Vetta
ACM Conference on Economics and Computation, EC 2020.

- **Approximating Gains from Trade in Two-Sided Markets via Simple Mechanisms**

Johannes Brüstle, Yang Cai, Fa Wu, Mingfei Zhao

ACM Conference on Economics and Computation, EC 2017.

Preprints and current manuscripts

- **Prophet Inequality with Conservative Prediction**

Johannes Brüstle, Ilan Reuven Cohen, Stefano Leonardi

arXiv:2602.17358, 2026; under submission to SODA.

- **Anonymous Contracts**

Johannes Brüstle, Paul Dütting, Stefano Leonardi, Tomasz Ponitka, Matteo Russo

arXiv:2602.12118, 2026; under submission to SODA.

- **Procurement Auctions for Generative AI Search**

Johannes Brüstle, Riccardo Colini Baldeschi, Michael Curry, Federico Fusco, Ido Guy, Stefano Leonardi, Ermis Soumalias

TEACHING EXPERIENCE

Sapienza University of Rome

- **Economics and Computation**, co-taught with Prof. Stefano Leonardi, second semester 2025/2026, for Master's students in Data Science.

Teaching assistantships

- Introduction to Abstract Mathematics, London School of Economics Aug. 2022 – Apr. 2023
- Optimization, London School of Economics Jan. 2022 – Apr. 2022
- Further Quantitative Methods, London School of Economics Jan. 2021 – Apr. 2021
- Algorithm Design, McGill University Sept. 2017 – Apr. 2018

ACADEMIC SERVICE

- Program committee member, Economics and Computation (EC) 2026.
- Program committee member, NeurIPS 2025.
- Reviewer, Mathematics of Operations Research (MOR), 2025.
- Program committee member, Web and Internet Economics (WINE), 2024.
- Program committee member, ACM Conference on Economics and Computation (EC), 2023.
- Reviewer, ACM-SIAM Symposium on Discrete Algorithms (SODA), 2023.
- Reviewer, ACM Transactions on Economics and Computation (TEAC), 2022.
- Program committee member, Learning with Strategic Agents Workshop (LSA), 2022.

AWARDS AND FUNDING

- LSE PhD Studentship, London School of Economics, £21,000 per year (Sept. 2020 – Sept. 2024).
- NSERC Graduate Scholarship, Master's program, CAD 12,000 (Sept. 2017 – Aug. 2018).
- Graduate Excellence Award in Computer Science, McGill University, CAD 7,000 (Sept. 2017 – Aug. 2018).
- NSERC Undergraduate Summer Research Award with Prof. Maxime Descoteaux, University of Sherbrooke, CAD 6,000 (May – Aug. 2014).

LANGUAGES

German, English, and French: fluent.