

Martin Durand

✉ martin.durand@lip6.fr

🌐 <https://perso.lip6.fr/Martin.Durand/>

Post-doctoral positions

- 2025 – 2026 ■ **CNRS - LIP6** Algorithms for low discrepancy point sets generation, supervised by Carola Doerr. The algorithms rely on mathematical programming and evolutionary techniques.
- 2023 – 2024 ■ **TU Wien** Parameterized complexity and algorithms for computational social choice and algorithmic game theory, supervised by Jiehua Chen.

Education

- 2020 -2023 ■ **Ph.D., Sorbonne Université; LIP6**, Computer Science.
Axiomatic and computational aspects of discrete optimization problems in collective settings: From multi-agent scheduling to participatory budgeting., supervised by Fanny Pascual.
- 2018 – 2020 ■ **Master's degree, Sorbonne Université**, Computer Science.
Master ANDROIDE: Operations Research, Decision Theory, Game Theory, Multi-Agent Systems.

Publications

Journal Articles

- 1 M. Durand and F. Pascual, “Efficiency and equity in the multi organization scheduling problem,” *Theoretical Computer Science*, vol. 864, pp. 103–117, 2021, ISSN: 0304-3975. [🔗 DOI: https://doi.org/10.1016/j.tcs.2021.02.031](https://doi.org/10.1016/j.tcs.2021.02.031).

Conference Proceedings

- 1 J. Chen, M. Durand, and C. Hatschka, “Multi-organizational scheduling: Individual rationality, optimality, and complexity,” in *Proceedings of the Thirty-Fourth International Joint Conference on Artificial Intelligence*, ser. IJCAI '25, Montreal, Canada, 2025, ISBN: 978-1-956792-06-5. [🔗 DOI: 10.24963/ijcai.2025/420](https://doi.org/10.24963/ijcai.2025/420).
- 2 M. Durand, L. Erlacher, J. Müller Vistisen, and S. Simola, “Parameterized complexity of hedonic games with enemy-oriented preferences,” in *Proceedings of AAMAS-2025 (IFAAMAS)*, 2025.
- 3 M. Durand and F. Pascual, “Collective schedules: Axioms and algorithms,” in *Algorithmic Game Theory*, P. Kanellopoulos, M. Kyropoulou, and A. Voudouris, Eds., Cham: Springer International Publishing, 2022, pp. 454–471, ISBN: 978-3-031-15714-1.
- 4 M. Durand, F. Pascual, and O. Spanjaard, “A non-utilitarian discrete choice model for preference aggregation,” in *Scalable Uncertainty Management*, F. Dupin de Saint-Cyr, M. Öztürk-Escoffier, and N. Potyka, Eds., Cham: Springer International Publishing, 2022, pp. 157–171, ISBN: 978-3-031-18843-5.

Pre-prints

- 1 I. A. Abderrahim, C. Doerr, and M. Durand, *Finding low star discrepancy 3d kronecker point sets using algorithm configuration techniques*, 2026. arXiv: 2604.00786 [cs.NE]. [🔗 URL: https://arxiv.org/abs/2604.00786](https://arxiv.org/abs/2604.00786).
- 2 M. Durand, *Two np-hard extensions of the spearman footrule even for a small constant number of voters*, 2026. arXiv: 2602.21332 [cs.CC]. [🔗 URL: https://arxiv.org/abs/2602.21332](https://arxiv.org/abs/2602.21332).

- 3 M. Durand and F. Pascual, *Collective schedules: Axioms and algorithms*, 2024. arXiv: 2403.18642 [cs.GT].
🔗 URL: <https://arxiv.org/abs/2403.18642>.
- 4 M. Durand and F. Pascual, *Detecting and taking project interactions into account in participatory budgeting*, 2024. arXiv: 2403.19194 [cs.GT]. 🔗 URL: <https://arxiv.org/abs/2403.19194>.
- 5 M. Durand and F. Pascual, *Ordering collective unit tasks: From scheduling to computational social choice*, 2024. arXiv: 2403.19197 [cs.GT]. 🔗 URL: <https://arxiv.org/abs/2403.19197>.

Skills

Languages 📖 English, French.
Programming 📖 C/C++, Java, Python, \LaTeX , ...

Other experience

Internships

- 2020 📖 Master 2 internship in LIP6. Supervised by Fanny Pascual and Olivier Spanjaard. Probabilistic approaches to the rank aggregation problem.
- 2019 📖 Master 1 internship in LIP6. Supervised by Fanny Pascual. Multi-Organization Scheduling.

Teachings

- 2025-2026 📖 Supervision of students for a course designed to introduce bibliographical research and a research project.
- 2024-2025 📖 Student co-supervision for a research project and exercise sessions for an algorithmic social choice course.
- 2020-2023 📖 192 hours of teachings during the PhD, including TD for algorithmic (Bachelor 2nd and 3rd year), programming (Bachelor 2nd year), and problem modeling and resolution (Master 1st year).

Others

- 2023 📖 Participation to the "Fête de la science" (Science popularization) at Sorbonne Université.
- 2022-2023 📖 Organizer of the PhD seminar for the RO and DECISION teams of LIP6.
- Reviewing 📖 PC Member/Reviewer for AACL, IJCAI, AAMAS, ECAI. Reviews for EJOR, Artificial Intelligence.