

Curriculum Vitae

PERSONAL DETAILS

Family name, first name: Rohwedder, Lars
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- **Education and key qualifications**

01/10/2019 Ph.D. in Computer Science (summa cum laude)
 University of Kiel, Kiel, Germany
 Supervisor: Klaus Jansen
 2016 Master in Computer Science
 University of Kiel, Kiel, Germany

- **Current position**

2021-ongoing Tenured Assistant Professor
 School of Business and Economics, Maastricht University, Maastricht, Netherlands

- **Previous positions**

2019-2021 Post-Doc
 School of Computer and Communication Sciences, EPFL, Lausanne, Switzerland
 2015 Research Assistant
 VMWare, Palo Alto, USA
 duration: 3 months
 2013-2014 Research Assistant
 Oracle Labs, Redwood Shores, USA
 duration: 9 months

RESEARCH ACHIEVEMENTS AND PEER RECOGNITION

Publications (selection)

Below is a list of my 10 most significant publications. As is standard in theoretical computer science, the authors are ordered alphabetically in all publications. Only two of the selected papers [10, 4] are co-authored by my Ph.D. supervisor and six of them [3, 6, 7, 10, 5, 8] have completely disjoint sets of co-authors, which proves a high independence as well as the capability to work with various teams. The paper [3] is an example of a very successful project with only a student co-author. I have published four papers at STOC, the top conference of theoretical computer science, and four papers at SODA, the top conference for discrete algorithms. The STOC paper [6] was invited to the SICOMP special issue (top 10-15% of the accepted papers) and invited for presentation at HALG'23. In total, I have 26 papers published or accepted for publication in conferences and 7 papers in journals. Note that within the theoretical computer science community conferences are main instrument of publication rather than journals. According to Google Scholar, I have an H-index of 10 and my publications have been cited a total of 381 times.

- [1] Étienne Bamas, Alexander Lindermayr, Nicole Megow, Lars Rohwedder, and Jens Schlöter. “Santa Claus meets Makespan and Matroids: Algorithms and Reductions”. In: *Proceedings of SODA*. to appear. 2024.
- [2] Alexander Armbruster, Lars Rohwedder, and Andreas Wiese. “A PTAS for Minimizing Weighted Flow Time on a Single Machine”. In: *Proceedings of STOC*. 2023, pp. 1335–1344.
- [3] Étienne Bamas and Lars Rohwedder. “Better Trees for Santa Claus”. In: *Proceedings of STOC*. 2023, pp. 1862–1875.
- [4] Klaus Jansen and Lars Rohwedder. “On Integer Programming, Discrepancy, and Convolution”. In: *Mathematics of Operations Research* 48.3 (2023), pp. 1481–1495.
- [5] Kim-Manuel Klein, Adam Polak, and Lars Rohwedder. “On Minimizing Tardy Processing Time, Max-Min Skewed Convolution, and Triangular Structured ILPs”. In: *Proceedings of SODA*. 2023, pp. 2947–2960.
- [6] Nikhil Bansal, Lars Rohwedder, and Ola Svensson. “Flow time scheduling and prefix Beck-Fiala”. In: *Proceedings of STOC*. **Invited to SICOMP special issue**. 2022, pp. 331–342.
- [7] Jana Cslovjecsek, Friedrich Eisenbrand, Christoph Hunkenschröder, Lars Rohwedder, and Robert Weismantel. “Block-Structured Integer and Linear Programming in Strongly Polynomial and Near Linear Time”. In: *Proceedings of SODA*. 2021, pp. 1666–1681.
- [8] Lars Rohwedder and Andreas Wiese. “A $(2 + \epsilon)$ -approximation algorithm for preemptive weighted flow time on a single machine”. In: *Proceedings of STOC*. 2021, pp. 1042–1055.
- [9] Étienne Bamas, Andreas Maggiori, Lars Rohwedder, and Ola Svensson. “Learning augmented energy minimization via speed scaling”. In: *Proceedings of NeurIPS*. 2020, pp. 15350–15359.
- [10] Klaus Jansen and Lars Rohwedder. “A quasi-polynomial approximation for the restricted assignment problem”. In: *SIAM Journal on Computing* 49.6 (2020), pp. 1083–1108.

Invitations (selection)

- 2023 Keynote talk at Gerhard Woeginger Research Colloquium of RWTH Aachen
- 2023 Invited lecture at theory seminar of University of Michigan
- 2023 Invited to Workshop on Combinatorics of Integer Programming at Erdős Center, Rényi Institute
- 2023 Invited lecture at SPOR seminar of TU Eindhoven
- 2023 Invited to Dagstuhl seminar on Scheduling
- 2023 Invited lecture at online Scheduling seminar
- 2022 Plenary talk at Dutch Day of Optimization
- 2021 Invited to Hausdorff Trimester on Discrete Optimization
- 2020 Invited to Dagstuhl seminar on Scheduling

Reviewing and committees

- PC member of conferences ICALP’24 (upcoming), APPROX’23, SODA’23, WAOA’20. In particular, the invitation to the committee of the top conference SODA shows an outstanding role within the research community.
- Guest editor for SODA’23 special issue of TALG.

Academic fellowships and memberships

- LNMB member (Dutch Network on the Mathematics of Operations Research)
- GSBE fellowship (Graduate School of Business and Economics, Maastricht University)
- Alumni of Studienstiftung (German Academic Scholarship Foundation).

Grants and awards

2023-2027	NWO open competition M1 grant (€290,737.00) ranked #1 out of 23 proposals within cluster
2021-2025	Maastricht University GSBE Small Scale Research grant (€4,000.00)
2019	Award for Ph.D. thesis of the year by "Förderverein der TF" of Kiel University

TEACHING AND SUPERVISION

Teaching

In Maastricht, I teach on average 4-6 courses per year as lecturer, coordinator, or tutor, including:

- Lecturer of Ph.D. course *Randomized Algorithms* for LNMB network (together with René Sitters)
- Coordinator of Master course *Algorithms and Optimization* (together with Tom van der Zanden)
- Coordinator of Bachelor courses *Advanced Algorithms* and *Operations Management* at Maastricht University.
- Organization of a cross-institution reading group on learning-augmented algorithms (2022, together with Daniel Dadush, CWI, and Antonios Antoniadis, UTwente).
- Organization of the Operations Research Lunch Seminar at Maastricht University.

Supervision

- I am supervisor of Ph.D. student Leonie Krull who is working on my own NWO open competition grant and I am co-supervising the Ph.D. student Ashkan Safari (together with Tjark Vredeveld). Furthermore, I served in the Ph.D. committee of Moritz Buchem (2022).
- I am or was supervising several long-term research projects with Master students at Maastricht: Peter van Mill (current), Tobias Breuer (2022-2023).
- I supervised 5 B.Sc. theses in Maastricht, 1 M.Sc. theses in Maastricht, 2 M.Sc. theses in Kiel, 2 B.Sc. theses in Kiel.
- I hosted a research visit from Ph.D. student Sarah Morell in Maastricht in 2023 (4 weeks) and an internship for Arthur Leonard in 2022 (6 months, together with Daniel Dadush, mostly online from CWI).