

Dr. Henri Mühle

Contact Information

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 Webpage: <https://hmuehle.github.io>

Research Interests

Combinatorics of Reflection Groups.
 Fuß–Catalan Combinatorics.
 Lattice Theory.
 Poset Topology and Poset Construction.

Awards and Funding

Nikolaus-Joachim-Lehmann-Award, TU Dresden. 2009.
 Postdoctoral Fellowship, Fondation Sciences Mathématiques de Paris. 2014.
 Travel Award, Graduiertenakademie TU Dresden. 2019.
 Grant Proposal, DFG. 2022 (rejected).

Selected Publications

- H. Mühle:** *EL-Shellability and Noncrossing Partitions Associated with Well-Generated Complex Reflection Groups.* European Journal of Combinatorics **43(C)**, 249–278. 2015.
- H. Mühle:** *The Core-Label Order of a Congruence-Uniform Lattice.* Algebra Universalis, **80(1)**. Article 10, 22 pages. 2019.
- C. Ceballos, W. Fang & **H. Mühle:** *The Steep-Bounce Zeta Map in Parabolic Cataland.* Journal of Combinatorial Theory (Series A), **172**. Article 105210, 59 pages. 2020.
- H. Mühle:** *Noncrossing Arc Diagrams, Tamari Lattices, and Parabolic Quotients of the Symmetric Group.* Annals of Combinatorics **25(2)**, 307–344. 2021.
- C. Ceballos & **H. Mühle:** *F- and H-Triangles for v -Associahedra.* Combinatorial Theory **2(2)**. Article 3, 26 pages. 2022.

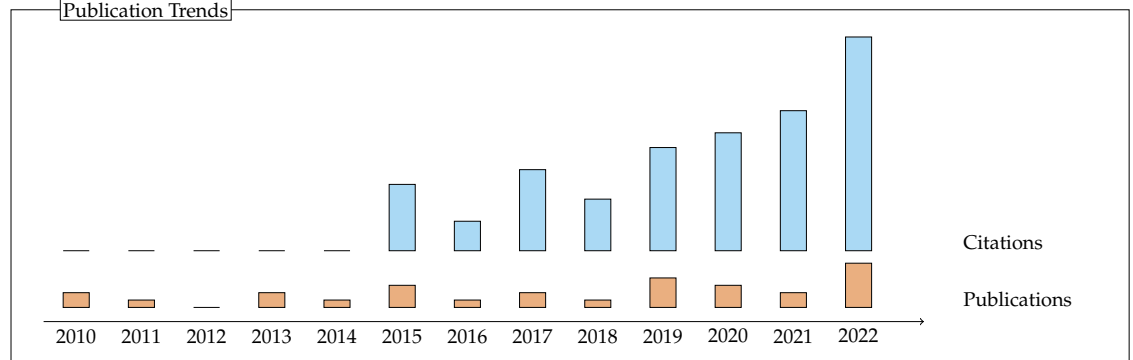
Selected Talks

- Poset-Topological Aspects of Noncrossing Partition Lattices.*
 At: Journées de Combinatoire.
 Bordeaux, France. 2015.
- The Core Label Order of a Congruence-Uniform Lattice.*
 At: 97th Arbeitstagung Allgemeine Algebra.
 Vienna, Austria. 2019.
- Shuffle Lattices and Bubble Lattices.*
 At: 86th Séminaire Lotharingien de Combinatoire.
 Bad Boll, Germany. 2021.
- Chapoton's Triangles, Lattice Paths and Reciprocity.*
 At: Matroids, Ordered Sets, Arrangements in Combinatorics.
 Manchester, UK. 2022.

Teaching Overview

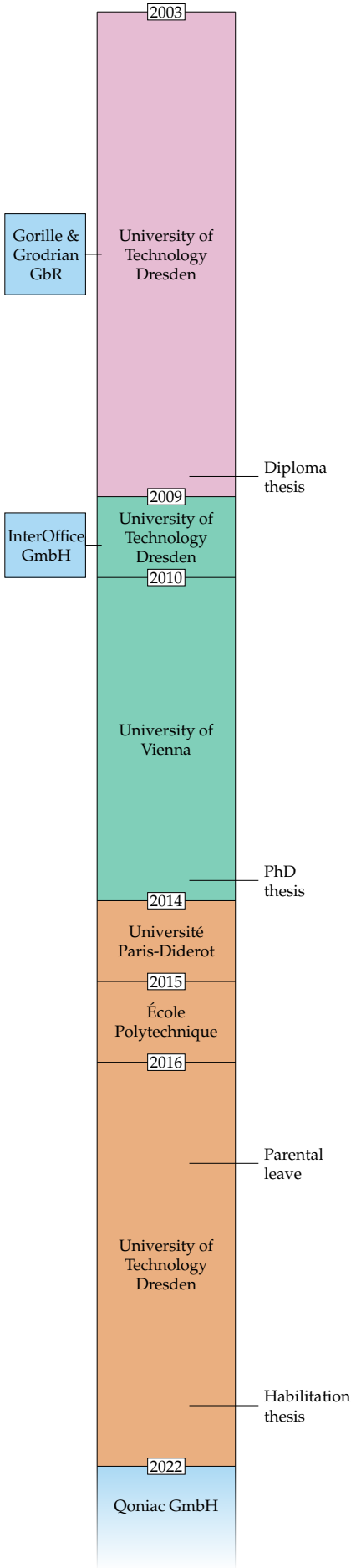
- Lecturer.**
 Coxeter–Catalan-Kombinatorik.
 Geordnete Mengen in Hyperebenenarrangements.
 Nichtkreuzende Partitionen.
- Teaching Assistant.**
 Mathematik für Informatiker (Diskrete Strukturen).
 Mathematik für Informatiker (Lineare Algebra).
 Algebra für Informationssystemtechniker.
- Instructor.**
 Mathematische Methoden für Informatiker 1.
 Mathematische Methoden für Informatiker 2.
 Lineare Algebra—Weiterführende Konzepte.
 Algebra und Zahlentheorie.

Publication Trends



Teaching Evaluation

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| The instructor... | |
| ... appears to be well prepared. | <div style="width: 90%; background-color: #d9ead3;"></div> |
| ... speaks inspiringly and comprehensibly. | <div style="width: 95%; background-color: #d9ead3;"></div> |
| ... actively communicates the learning topics. | <div style="width: 90%; background-color: #d9ead3;"></div> |
| ... addresses questions and contributions of the participants. | <div style="width: 95%; background-color: #d9ead3;"></div> |
| ... helps to better understand the learning material. | <div style="width: 90%; background-color: #d9ead3;"></div> |



Legend

- Student
- PhD Student
- Postdoc
- Programmer