Laura Breitkopf

Current Position

2021-present Research Assistant (Ph.D. student), University of Bremen

> Research project "Spectral theory with non-unitary twists" in Priority Programme "Geometry at Infinity" of the German Research Foundation (DFG) under supervision of Prof. Dr. Anke Pohl

Education

2021-present Ph	ı.D. in	Mathematics.	University	of Bremen
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- 2018–2021 Mathematics, M.Sc., University of Bremen
 - > Specialization in analysis, with a minor in computer science
 - > Thesis "The Stern—Brocot Sequence for a Non-Arithmetic Hecke Triangle Group", advised by Prof. Dr. Anke Pohl
- 2015–2018 Mathematics, B.Sc., University of Bremen
 - > Thesis "Tangent and Curvature Estimation of 2D Point Clouds", advised by Prof. Dr. Emily King

Honors and Awards

- 2022 SAP Grant for the 9th Heidelberg Laureate Forum, Heidelberg
- 2022 Mathematics faculty award for an outstanding master thesis, University of Bremen
- 2021 Main prize of the student conference "StuKon" of the German Mathematical Society (DMV), University of Passau
- 2019–2021 **Deutschlandstipendium**, *University of Bremen*
- 2016–2018 **Deutschlandstipendium**, *University of Bremen*

Experiences

Talks

- 2023 Workshop "8th Hanseatic Dynamical System Days", Constructor University, Bremen
- 2023 Short talk at conference "Women in Automorphic Forms", University of Konstanz
- 2023 Conference "Thermodynamic Formalism: Non-additive Aspects and Related Topics", *IMPAN, Będlewo, Poland*
- 2023 Seminar "Geometry and Dynamical Systems", University of Bremen
- 2023 Seminar of the analytic number theory group, RWTH Aachen
- 2022 Workshop " \mathbb{N}^3 -Days XVII", University of Hamburg
- 2022 Seminar "Operator Theoretic Aspects of Ergodic Theory", Joint seminar of the Universities of Kiel, Leipzig, Tübingen and Wuppertal
- 2022 Seminar "Geometry and Dynamical Systems", University of Bremen
- 2021 Student conference "StuKon" of the DMV, University of Passau

Organized Conferences and Workshops

2023 DMV student conference "StuKon 2023", University of Bremen

- 2022 Workshop "6th Hanseatic Dynamical System Days" *University of Bremen*
- 2022 Co-leader of a mathematical workshop for "Girl's Day", University of Bremen

Attended Conferences and Workshops

- 2023 Workshop "8th Hanseatic Dynamical System Days", Constructor University, Bremen
- 2023 Conference "Women in Automorphic Forms", University of Konstanz
- 2023 Conference "Dynamics and asymptotics in algebra and number theory", *University of Bielefeld*
- 2023 Workshop "7th Hanseatic Dynamical System Days" University of Hamburg
- 2023 Conference "Thermodynamic Formalism: Non-additive Aspects and Related Topics", *IMPAN*, *Będlewo*, *Poland*
- 2023 2-week research visit at the analytic number theory group of Prof. Dr. Aloys Krieg, RWTH Aachen
- 2022 Conference "Group Actions: Dynamics, Measure, Topology", University of Münster
- 2022 9th Heidelberg Laureate Forum (HLF), attending as a young researcher, Heidelberg
- 2022 Fifth workshop "Hanseatic Dynamical System Days", University of Kiel
- 2021 DMV-ÖMG Annual Meeting, University of Passau
- 2019 7th Bremen Summer School, "Dynamical Systems pure and applied", *University of Bremen*

Thesis supervision

- 2021 Arthur Konschin, Bachelor thesis "Iterierte Urbilder der Farey-Abbildung: eine effektive Masseabschätzung mittels Transferoperatortechniken" (first supervisor: Anke Pohl)
- 2021 Kieran Taylor, Bachelor thesis "The Pisot Conjecture for Beta-substitutions" (first supervisor: Anke Pohl)

Assistant Positions

- 2020–2021 **Student research assistant**, Bremen Institute for Metrology, Automation and Quality Science (BIMAQ), University of Bremen
- 2019–2020 **Teaching assistant**, *University of Bremen*
 - > Elementary number theory, summer term 2020
 - > Complex analysis, winter term 2019/2020
- 2015–2020 **Student research assistant**, Robotics Innovation Center of the German Research Center for Artificial Intelligence (DFKI GmbH), Bremen

Skills

English Fluent (Level C2, Cambridge Level 3 Certificate)

French Intermediate

Programming Python, Sagemath, Matlab, Java

Bremen, January 11, 2024