

Paul Wabnitz, Ph.D.

Positions

2020–2022 **Research Assistant (Ph.D. student)**, *University of Bremen*.

2017–2020 **Research Assistant (Ph.D. student)**, *Friedrich-Schiller-Universität Jena*, transferred to *University of Bremen* in May 2018, in research project (DFG) “Locally Symmetric Spaces and Transfer Operators”.

PhD Thesis

Title *Existence of Strict Transfer Operator Approaches for Non-Compact Developable Hyperbolic Orbisurfaces*

Supervisor Prof. Dr. Anke Pohl, University of Bremen.

Education

2017–2022 **Ph.D.**, *Friedrich-Schiller-Universität Jena and University of Bremen*.

2010–2016 **Diploma Study of Mathematics**, *Universität Leipzig*.

Diploma Thesis

Title *Sarnak's Conjecture about Möbius Function Randomness in Deterministic Dynamical Systems*

Supervisor Prof. Dr. Tatjana Eisner, Universität Leipzig.

Extended Stays

Jan–April 2020 **Trimester Program**, *Dynamics: Topology and Numbers*, Hausdorff Research Institute for Mathematics (HIM), Bonn.

Publications

Preprints

- [1] *Selberg zeta functions, cuspidal accelerations, and existence of strict transfer operator approaches*, (with A. Pohl), arXiv:2209.05927.
- [2] *Strict transfer operator approaches for orbifolds without cusps*, arXiv:2209.06601.

Conferences & Workshops

Jul 2017 Conference “*Thermodynamic Formalism*”, University of Bremen.

Apr 2018 Colloquium in Honor of Prof. Thomas Kühn, Friedrich-Schiller-Universität Jena.

Jun 2018 First Workshop “*Hanseatic Dynamical System Days*”, University of Hamburg.

Jul 2018 Conference “*Dynamics: Topology and Numbers*”, Max Planck Institute for Mathematics (MPIM), Bonn.

Aug 2018 Summer School “*Spectral Theory of Schrödinger Operators*”, Friedrich-Schiller-Universität Jena.

Nov 2018 Second Workshop “*Hanseatic Dynamical System Days*”, University of Lübeck.

- Jun 2019 Third Workshop "*Hanseatic Dynamical System Days*", University of Bremen.
- Jun 2019 Oberwolfach Seminar "*Anisotropic Spaces and their Applications to Hyperbolic and Parabolic Systems*", Mathematisches Forschungsinstitut Oberwolfach.
- Jul 2019 Summer School "*Thermodynamic Formalism: Modern Techniques in Smooth Ergodic Theory*", Centre International de Rencontres Mathématiques (CIRM), Luminy (Marseille).
- Jul 2019 Workshop "*Thermodynamic Formalisms: Ergodic Theory and Geometry*", University of Warwick, Coventry.
- Aug 2019 7th Bremen Summer School and Symposium "*Dynamical systems – pure and applied*", University of Bremen.
- Dec 2019 Forth Workshop "*Hanseatic Dynamical System Days*", Jacobs University, Bremen.
- Jan 2020 Winter School "*Dynamics: Topology and Numbers*", HIM, Bonn.
- Feb 2020 Conference "*Transfer operators in number theory and quantum chaos*", HIM, Bonn.
- Mar 2020 Conference "*Dynamics on homogeneous spaces*", HIM, Bonn.
- Apr 2020 BiSTRO Seminar, <https://sites.google.com/view/bistro-seminar/> (ongoing online seminar series)
- Sep 2020 DMV Annual Meeting 2020, TU Chemnitz, Section "*Differential Geometry and Global Analysis*".
- Jun 2022 Fifth Workshop "*Hanseatic Dynamical System Days*", Christian-Albrechts-Universität zu Kiel.
- Dec 2022 Sixth Workshop "*Hanseatic Dynamical System Days*", University of Bremen.

Organization

- Aug 2018 Local Organizer for the Summer School "*Spectral Theory of Schrödinger Operators*".
- Aug 2019 Local Organizer for 7th Bremen Summer School "*Dynamical systems*".

Talks & Poster Presentations

- May 2018 Talk at Oberseminar "*Geometry and Dynamical Systems*", University of Bremen.
- Aug 2018 Talk at Summer School "*Spectral Theory of Schrödinger Operators*".
- Nov 2018 Poster presentation at "*Hanseatic Dynamical System Days*".
- Jun 2019 Talk at Third Workshop "*Hanseatic Dynamical System Days*".
- Jun 2019 Talk at Oberwolfach Seminar "*Anisotropic Spaces*".
- Jul 2019 Talk at Ph.D. Seminar, Friedrich-Schiller-Universität Jena.
- Jul 2019 Poster presentation at Summer School "*Thermodynamic Formalism*".
- Jul 2019 Poster presentation at Workshop "*Thermodynamic Formalisms*".
- Aug 2019 Poster presentation at Summer School "*Dynamical systems – pure and applied*".
- Apr 2020 Talk at Oberseminar in Trimester Program "*Dynamics: Topology and Numbers*"
- Sep 2020 Talk at DMV Annual Meeting, Section "*Differential Geometry and Global Analysis*".
- Dec 2022 Talk at Sixth Workshop "*Hanseatic Dynamical System Days*".

Teaching

Universität Leipzig

WS 13/14 **Linear algebra I**, *Teaching assistant/Tutor.*

SS 14 **Linear algebra II**, *Teaching assistant/Tutor.*

WS 14/15 **Analysis for computer scientists and teachers**, *Teaching assistant/Tutor.*

SS 15 **Linear algebra for computer scientists and teachers**, *Teaching assistant/Tutor.*

WS 15/16 **Analysis for computer scientists and teachers**, *Teaching assistant/Tutor.*

University of Bremen

WS 20/21 **Complex analysis**, *Teaching assistant/Tutor.*

SS 21 **Analysis II**, *Teaching assistant/Tutor.*

WS 21/22 **Seminar on differential geometry.**

SS 22 **Seminar on differential geometry.**

Further activities

Spring 2018 **Geometry Workshop for school kids.**

Languages

English Fluent

German Native