Lucas M. Fix

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🌐 Personal Webpage

Employment

since Nov. 2024	**Research Assistant** (Chair of Applied Analysis at the University of Augsburg), working on analytical homogenisation in thin domains with evolving microstructure and the derivation of effective transmission conditions.
Sep. 2024 – Oct. 2024	**Research Assistant** (Department for Analysis and Mathematical Modelling at Heidelberg University), assisting the preparation of the lecture *Calculus of Variations*.
Apr. 2023 – Jul. 2024	**Teaching Assistant** (Department for Analysis and Mathematical Modelling at Heidelberg University), assisting the lectures *Partial Differential Equations* and *Calculus of Variations 2*.
Oct. 2021 – Mar. 2023	**Student Assistant** (Heidelberg University), leading tutorials for the lectures *Analysis 1*, *Analysis 2*, and *Higher Analysis*.
Oct. 2020 – Mar. 2021	**Student Assistant** (Heidelberg University), leading tutorials for the lecture *Analysis 1*.

Education

since Nov. 2024	**Doctoral Student** at the University of Augsburg, Supervisor: Prof. Dr. M. A. Peter.
Oct. 2021 – Sep. 2024	**M.Sc. in Mathematics, Heidelberg University**. • Thesis title: *Elliptic Regularity Theory for the Robin Laplacian on Domains with an Exterior Cusp*, Supervisor: Prof. Dr. H. Knüpfer. • Specialisations: *Applied analysis*, especially *partial differential equations* and *calculus of variations*.
Oct. 2017 – Sep. 2021	**B.Sc. in Physics, Heidelberg University**. • Thesis title: *Nonlinear Electrodynamics and its Applications in Cosmology*, Supervisor: Prof. Dr. M. Bartelmann. • Specialisations: *Theoretical physics* and *astrophysics*.
Jun. 2017	**Abitur, Gymnasium Neuenbürg**

Memberships

Aug. 2023 – Oct. 2024	**Member of the Young Researchers Convent**, a subgroup of the STRUCTURES Cluster of Excellence.
Jan. 2023 – Oct. 2024	**Participation in the PhD Discussion Group**, a regular meeting of postdocs, PhD and master's students from the applied analysis groups at Heidelberg University to discuss their research.

Invited Talks

Oct. 2024   ▣   Technical University of Darmstadt, Oberseminar *Analysis*

Jul. 2024   ▣   Technical University Dortmund, Oberseminar *Angewandte Analysis*
University of Augsburg, Oberseminar *Mathematische Modellierung und partielle Differentialgleichungen*

Workshops

Nov. 2024   ▣   **Fluid flow and reactive transport in porous media**, workshop at the Mathematical Institute for Machine Learning and Data Science (MIDS) of the KU Eichstätt-Ingolstadt.

Jun. 2024   ▣   **Conference on Calculus of Variations in Lille - 4th edition**, workshop at Laboratoire Paul Painlevé, Université de Lille.

Apr. 2023   ▣   **Compact course "The gradient flow structure of mean curvature flow"**, given by STRUCTURES guest Prof. Dr. T. Laux at Heidelberg University.