

Jonas Bresch

academic CV

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☎ tba

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Education

- 2022–now **Ph.D. student**, *Fakultät II at the Technische Universität, Berlin*
AG: Modeling, Numeric, Differential Equation,
Supervisor: Prof. Dr. Gabriele Steidl,
Field of Topic: Optimization on Manifolds, regularized Optimal Transport, Relaxation Theory.
- 2020–2022 **M. Sc.**, *C.-F.-Gauß Fakultät at the Technische Universität, Braunschweig, (1.4)*
Field of Topic: Group Theory, Game Theory, Numerical Linear Algebra, Numeric Partial
Differential Equations.
- 2017–2020 **B. Sc.**, *C.-F.-Gauß Fakultät at the Technische Universität, Braunschweig, (1.6)*
Field of Topic: Group Theory, Optimization (linear and non-linear), Graph Theory, Analysis,
Algebra (linear and non-linear).
- 2009–2017 **Pre-university school**, *Gaußschule Gymnasium am Löwenwall, Braunschweig, (2.3)*
Topic of Exams: Math, Physics, Music, German, History.

Theses and Publications

Pre-print

- Title *Denoising of Sphere- and $SO(3)$ -Valued Data by Relaxed Tikhonov Regularization.*
20 July, 2023 R. Beinert, J. Bresch, G. Steidl, <https://arxiv.org/abs/2307.10980>.

Master thesis

- Title *Finite p -groups with Cyclic Frattini Subgroup.*
Supervisors Prof. Dr. Bettina Eick, Prof. Dr. Timo de Wolf

Bachelor thesis

- Title *Schur Multipliers of some Groups of Order p^7 .*
Supervisors Prof. Dr. Bettina Eick, M. Sc. Alexander Cant

Experience

Technische Universität Berlin

- 2023 **Assistant**, *Main Exercise of Lectures*
○ Convex Analysis, Lecture: Johannes Hertrich; *ST23, 2 hours.*

Technische Universität Braunschweig

- 2022 **Student Assistant**, *Main Exercise for a Lecture*
○ Algebra for Computer Scientists, Lecture: Matthias Neumann-Brosig; *ST22, 2 hours.*

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2019–2022 **Student Assistant**, *Exercises and Tutorials of several Lectures (Selection)*

- Computer oriented Mathematics II, Lecture: Matthias Bollhöfer; *ST22*, 2 hours.
- Computer oriented Mathematics I, Lecture: Matthias Bollhöfer; *WT21*, 2 hours.
- Linear Algebra II, Lecture: Bettina Eick; *ST21*, 2 hours.
- Function Theory, Lecture: Dirk Lorenz; *ST21*, 2 hours.
- Linear Algebra I, Lecture: Bettina Eick; *WT20*, 2 hours.
- Analysis III, Lecture: Dirk Lorenz; *WT20*, 2 hours.
- Analysis II, Lecture: Dirk Lorenz; *ST19*, 2 hours.
- Math III for Electrical Engineers, Lecture: Volker Bach; *WT19*, 2 hours.

Conferences

September 2023 **Workshop and Summer School on Applied Analysis**, TU Chemnitz, Germany
Talk and Presentation.

February 2023 **MIA**, Berlin, Germany
participate.

Scholarship

WT22 **Promotionsstipendium**

in cooperation with the Technische Universität Berlin at the chair of Prof. Dr. Steidl for applied and numerical mathematics.

WT22–ST23 **Deutschland Stipendium**, *pronounced and declined*

in cooperation with the Technische Universität Braunschweig and Braunschweiger NordLB.

WT21–ST22 **Deutschland Stipendium**, *pronounced and accepted*

in cooperation with the Technische Universität Braunschweig and HDI VVaG.

Languages

German *mother tongue*

English *fluent*

Computer Skills

mostly used C, GAP, Python, Latex, Matlab

less used C++, R, Java, html, Julia

References

Prof. Dr. Gabriele Steidl

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Prof. Dr. Bettina Eick

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Prof. Dr. Dirk Lorenz

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Prof. Dr. Matthias Bollhöfer

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