

### Research interests

Global Analysis, Metric Geometry, Riemannian Geometry, Alexandrov geometry, Surfaces with singularities

### Academic

- 2023- **PhD Thesis**, *TU Chemnitz and CAU Kiel*, Germany  
*Analysis on metric surfaces with bounded integral curvature* under supervision of Batu Güneysu
- 2022-2023 **Master's degree in fundamental mathematics - Algebra and Geometry**, *Nantes Université*, France, 2nd year  
Master's thesis on *Calderon-Zygmund inequalities on Riemannian manifolds* under supervision of Gilles Carron
- 2021-2022 **Master's degree in fundamental mathematics**, *Université d'Angers*, France, 1st year  
Memoir on *differentiable manifolds and Stokes theorem* under supervision of Jean-Baptiste Campesato
- 2018-2021 **Bachelor's degree in mathematics**, *Université d'Angers*, France  
Bachelor's thesis on *group structure of elliptic curves* under supervision of Jean-Philippe Monnier

### Papers

- *Analysis on surfaces with locally bounded integral curvature* (with S. Boldt and B. Güneysu), in preparation
- *On two notions of curvature on singular surfaces*, 2025, in review at **The Journal of Geometric Analysis**
- *A Note on the Scattering Theory of Ricci-Kato Manifolds* (with B. Güneysu), 2024, to appear in **Rocky Mountain J. Math.**

### Research stays

- October 2025 **Vrije Universiteit Brussel**, *Brussels*  
I was invited for a week by David Tewodrose for a colabration on the link between bounded integral curvature surfaces and Kato-Ricci limits.

### Event organization

- March 2026 **The Laplacian: Spectral Theory, Geometry and Stochastics in Action**, Chemnitz  
Local organizer, management of website and registrations

### Presentations given

- Mai 2026 **Oberseminar Analysis**, CAU Kiel  
*Alexandrov meets himself on singular surfaces*
- April 2026 **Colloque de Géométrie**, Créteil  
*Alexandrov meets himself on singular surfaces*
- March 2025 **Phd Seminar**, Nantes  
*Heat kernel analysis on Alexandrov surfaces*

- March 2025 **Mini-Workshop: Recent Results on Loop Spaces**, Oberwolfach  
*Heat kernel analysis on Alexandrov-Dynkin surfaces*
- February 2025 **Winter School on Geometric and Harmonic Analysis**, Chemnitz  
*Heat kernel analysis on Alexandrov surfaces*

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## Seminar attendance

- January 2027 **JAG27: Journées d'Analyse Géométrique**, CIRM Marseille
- July 2026 **Scalar curvature, potential theory and notions of mass**, Nancy  
 I had full financial support from the conference
- January 2026 **Journées d'Analyse Géométrique**, Roscoff  
 I had full financial support from the conference
- June 2025 **Master Class in Differential Geometry: Flows and Singular Spaces**, Nantes  
 I had full financial support from the conference
- March 2025 **Mini-Workshop: Recent Results on Loop Spaces**, Oberwolfach
- February 2025 **Winter School on Geometric and Harmonic Analysis**, Chemnitz
- July 2024 **Geometry and Analysis on Metric Surfaces**, Warsaw
- June 2023 **Processes and heat kernels with symmetries**, Angers
- May 2023 **Lectures Sophie Kowalevski**, Angers
- December 2022 **Masterclass**, Angers  
 I followed the class *Canonical Kähler metrics and complex Monge-Ampère equations* by Hoang-Chinh Lu
- May 2022 **Lectures Sophie Kowalevski**, Angers
- July 2019 **International Conference on Optical Networks 2019**, Angers

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## Teaching

- WS24-25, SS25 Cosupervising with Batu Güneysu the Bachelorarbeit of Constantin Frödrich,  
*A sheaf-theoretic proof of the de Rham theorem*
- SS25 Cosupervising with Batu Güneysu the Diplomarbeit of Sebastian Wündsche,  
*Elementarer Zugang zum Satz von Hartogs (Elementary approach to Hartogs theorem)*

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## Other scientific activities

- March 2025 I wrote the report (published in **Oberwolfach Reports**) for the Mini-Workshop: Recent Results on Loop Spaces