Clemens Thalhammer

PhD Student · Applied Mathematics

✉ clemens.thalhammer@sam.math.ethz.ch | ⌂ cthalhammer.github.io

Education

ETH Zurich · *Zurich, Switzerland*
PhD Applied Mathematics · *since 2025*
- Supervisor: Habib Ammari

ETH Zurich · *Zurich, Switzerland*
MSc Applied Mathematics · *2023 - 2025*
- Focus in Mathematical Physics, Graduated with Distinction. Grade 5.78/6

ETH Zurich · *Zurich, Switzerland*
BSc Mathematics · *2020 - 2023*
- Grade 5.24/6

Professional Experience

2022, 2023 **Undergraduate Teaching Assistant**, ETH Zurich
2017-2019 **Coordinator**, Kinderuni Medizin, Medical University of Vienna
2013-2017 **Volunteer**, Kinderuni Medizin, Medical University of Vienna

Research Experience

Imperial College London - Dept. of Mathematics · *London, United Kingdom*
Advisors: Prof. Habib Ammari, Prof. Richard Craster, Dr. Bryn Davies · *Summer 2024*
- MSc Thesis: "Computational Models for Quasiperiodic Differential Equations"

Teaching Experience

2023 **Numerical Methods**, Exam Preparation Course
2023 **Numerical Methods**, Teaching Assistant
2022 **Numerical Methods**, Teaching Assistant

Awards, Fellowships, & Grants

2025 **ETH Medal for an outstanding Master Thesis**, ETH Zurich

Presentations

Invited Talks

Spring 2025. **Computational Models for Quasiperiodic ODEs**. Invited talk: Workshop on Metamaterials with Extra Dimensions, London, United Kingdom.

Leadership & Service

Leadership

VMM (Mid-level Faculty Association) · *Zurich, Switzerland*
Co-President · *since 2025*
Represented early-career researchers in faculty governance and contributed to policy development and strategic decisions. Acted as a liaison between faculty leadership and members, ensuring transparent communication and engagement.

SERVICE AND OUTREACH

Kinderuni Medizin, Medical University of Vienna *Vienna, Austria*

COORDINATOR *2017-2019*

Led the planning and execution of workshops for children, coordinating volunteers, scheduling events, and ensuring smooth program delivery for large audiences.

Publications

Habib Ammari, Silvio Barandun, Yannick De Bruijn, Ping Liu, Clemens Thalhammer. 2025. Spectra and pseudo-spectra of tridiagonal k-Toeplitz matrices and the topological origin of the non-Hermitian skin effect. Journal of Physics A: Mathematical and Theoretical 58(20):205201.

Bryn Davies, Clemens Thalhammer. 2025. Convergence of supercell and superspace methods for computing spectra of quasiperiodic operators. Proceedings of the Royal Society A 481(2319):20240894.

PREPRINTS

Habib Ammari, Clemens Thalhammer, Alexander Uhlmann. 2025. Uniform Hyperbolicity, Bandgaps and Edge Modes in Aperiodic Systems of Subwavelength Resonators. arXiv:2509.22417.