Marcel Scherer

Fachrichtung Mathematik, Saarland University 66123 Saarbrücken, Germany scherer@math.uni-sb.de

Education & Employment

Ph.D. in Mathematics Saarland University, Saarbrücken Jan 2022 - Present

M.Sc. in Mathematics Saarland University, Saarbrücken Apr 2020 – Apr 2022

B.Sc. in Mathematics Saarland University, Saarbrücken Oct 2015 – Apr 2020 Supervisor: Prof. Michael Hartz

Supervisor: Prof. Jörg Eschmeier, Prof.

Michael Hartz

Thesis: Spectra of Quotient Modules

Supervisor: Prof. Jörg Eschmeier Thesis: Essential Spherical Isometries

Publications

Preprints:

1) The Hyperrigidity Conjecture for compact convex sets in R^2 (2024), arXiv:2411.11709

Published:

- 1) A Finite Dimensional Counterexample for Arveson's Hyperrigidity Conjecture (2025), Bull. Lond. Math. Soc., arXiv:2502.10286
- 2) Spectra of typical Hilbert space operators, Israel J. Math. (2024), arXiv:2310.1849
- 3) Spectra of Quotient Modules, J. Funct. Anal. 286 (2024), No. 3, Paper No. 110223, 14 pp., (with Michael Didas, Jörg Eschmeier, Michael Hartz), arXiv:2306.02997
- 4) Essential spherical isometries, Acta Sci. Math. (Szeged) 86 (2020), No. 3-4, 667-670, arXiv:2105.05731

Presentations

Jan 2025 - Research Seminar, Copenhagen: "the lattice of C*-covers of an operator algebra"

May 2024 - Conference on Spaces of analytic functions and their operators, Saarbrücken: "Spectra of Quotient Modules"

Mar 2022 - Math and Hike Day, Saarbrücken: "Dilations and co-meager sets"

Jul 2021 - Research Seminar Noncommutative and Functional Analysis, Saarbrücken: "Spectra of Quotient Modules"

Conferences Attended

- Spaces of analytic functions and their operators (Universität des Saarlandes in Germany, 2024)
- Non-commutative Function Theory and Free Probability, (Mathematisches Forschungsinstitut Oberwolfach in Germany, 2024)
- IWOTA (International Workshop on Operator Theory and Applications), Helsinki, Finland (2023)
- ACOTCA (Advances in Complex and Operator Theory Conference), Thessaloniki, Greece (2023)
- IWOTA (International Workshop on Operator Theory and Applications), Jagiellonian, Polen (2022)

Referee for Journals

- Results in Mathematics, RIMA
- Journal of Operator Theory, JOT

Teaching Experience (Saarland University)

- Fall 2023, Teaching Assistant Analysis 3
- Spring 2023, Student Seminar on Analysis.
- Spring 2022, Seminar on completely positive maps
- 2023/2024, Substitute for some Analysis and Functional Analysis lectures
- Various tutoring activities in Analysis, Complex Analysis, Functional Analysis, and Hardy Spaces (2017–2022)