

Mehran Seyedhosseini

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Germany

RESEARCH INTERESTS Index Theory, Coarse Geomtry, Positive Scalar Curvature

EDUCATION University of Göttingen

Ph.D. in Mathematics, November 2019

- Dissertation Topic: Index Theory and Positive Scalar Curvature
- First Advisor: Thomas Schick
- Second Advisor: Ralf Meyer

M.Sc. in Mathematics, September 2017

- Minor in theoretical physics
- B.Sc. in Mathematics, September 2016
- Minor in theoretical physics

PUBLICATIONS AND PREPRINTS Thomas Schick, Mehran Seyedhosseini *On an Index Theorem of Chang, Weinberger and Yu* (2021, Münster Journal of Mathematics)

Simone Cecchini, Mehran Seyedhosseini, Vito Felice Zenobi *Relative torsion and bordism classes of positive scalar curvature metrics on manifolds with boundary* (September 2020)

Mehran Seyedhosseini *A Variant of Roe Algebras for Spaces with Cylindrical Ends with Applications in Relative Higher Index Theory* (March 2020)

TEACHING EXPERIENCE Schrödinger Operators over Dynamical Systems II (Summer 2020) (Co-lecturer)

Riemannian Geomtry (Summer 2021) (Lecturer)

Differential Geometry I (Winter 2020) (Lecturer)

Seminar on Representation Theory of Lie Algebras (Winter 2020) (Organiser)

Spectral Geometry (Summer 2020) (Lecturer)

Seminar on the Baum-Connes Conjecture (Summer 2020) (Co-organiser)

Seminar on Groupoids and Index Theory (Winter 2019) (Co-organiser)

Seminar on Morse Theory (Summer 2019) (Co-organiser)

Seminar on the Geometry and Analysis of the Atiyah-Singer Index Theorem (Winter 2018) (Co-organiser)

Tutor for numerous courses including functional analysis, mathematics for physicists and linear algebra

SERVICE WORK	I have refereed papers for the “Journal of Differential Geometry” and “Advances in Mathematics”.	
TALKS	On relative torsion and bordism classes of positive scalar curvature metrics at the conference “Microlocal and Global Analysis, Interactions with Geometry”, Potsdam (February 2021)	
	On variants of Roe algebras for spaces with cylindrical ends at the Oberseminar Global Analysis and Geometry at the university of Regensburg (May 2020)	
	On higher rho-invariants of positive scalar curvature metrics on manifolds with boundary at the conference “Microlocal and Global Analysis, Interactions with Geometry”, Potsdam (February 2020)	
	On higher rho-invariants of positive scalar curvature metrics on manifolds with boundary in the Oberseminar Differentialgeometrie at the university of Augsburg (January 2020)	
	On relative higher index theory in the Oberseminar Topologie at the university of Münster, (May 2019)	
	On the relative higher index at the SPP conference “Geometry at Infinity”, Münster (April 2019)	
	Talked in research meeting on the relative higher index class, Regensburg (October 2018)	
	Contributed to the gong show in the conference: Non-commutative Geometry, Index Theory and Mathematical Physics, Oberwolfach (July 2018)	
	Contributed to the gong show in the workshop: Secondary and delocalized index invariants, University of Copenhagen (June 2018)	
HONORS AND AWARDS	2013	Class Valedictorian Danube International School Vienna
	2011	Merit-based Scholarship Danube International School Vienna
	2010	4. Place in Khwarizmi Youth Robotics Competition
LANGUAGES	English	Fluent
	German	Fluent
	Persian	Native Language
	French	Elementary Proficiency