

1 Bibliographical Sketch

1.1 Ralf Meyer

Personal information

Prof. Dr. Ralf Meyer (male, born February 16, 1974)
Mathematisches Institut, Universität Göttingen, Bunsenstr. 3, 37073 Göttingen
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Academic Training

2004 Habilitation Universität Münster
1999 Promotion Universität Münster
1996 Dipl. Math. Universität Osnabrück

Academic Career

2006– Professor (W3), Universität Göttingen
2005–2006 Visiting assistant professor, Universität Göttingen
2000–2005 Research assistant, Universität Münster

Additional information

Nothing relevant.

Honours and Services

2013–2015 Special visiting professor, Univ. Sta. Catarina, Florianópolis, Brazil
2008 Session Speaker, Fifth European Congress of Mathematics, Amsterdam
2016– Speaker “Mathematisch-Naturwissenschaftlicher Fakultätentag”
2013–2015 Dean, Faculty of Mathematics and Computer Science
2010– Managing editor, “J. Homotopy and Related Structures”
2008–2012 Speaker of the Research Training Group 1493 “Mathematical Structures in Modern Quantum Physics”
2007–2015 Head, “School of Mathematical Sciences” (mathematics doctoral program in Göttingen)

Main research areas

Noncommutative geometry, C^* -algebras, K-theory and bivariant K-theory, bornological functional analysis

Specifically: bicategorical structures on C^* -algebras and locally compact groupoids, generalised symmetries of C^* -algebras, C^* -algebraic quantum groups, crossed product constructions, Fell bundles, product systems and more general diagrams of C^* -algebras of groupoids, coarse geometry through the stable Higson compactification, noncommutative extensions of coarse geometry, Rieffel deformation, generalised fixed point algebras for continuously square-integrable actions, geometric bivariant K-theory, Lefschetz invariants and traces in bivariant K-theory, homological algebra in bivariant K-theory with applications

to Universal Coefficient Theorems, the Baum–Connes conjecture, and classification of C^* -algebras, growth of powers in bornological algebras, homological algebra for bornological modules, representation theory for reductive p -adic groups, densely defined representations of $*$ -algebras on Hilbert modules

Doctoral students (within the last five years)

Suliman Albandik	–2015	Postdoc, Univ. Göttingen
Tathagata Banerjee	–2015	Visiting Scientist, ISI Bangalore, India
Rohit Holkar	–2014	Postdoc, IISER Pune, India
George Nadareishvili	–2015	
Sutanu Roy	–2013	Assistant Prof., NISER Bhubaneswar, India
Giorgi Arabidze		
Rohan Lean		
Jan Frederic Held		
Aleksi Tavkhelidze		
Ilia Nanobashvili		
Camila Fabre Sehnem	2015–	

Third-Party funding (within last five years)

2016–2017	VW Foundation Caucasus/Middle Asia Program: Coordinator of application to develop International Mathematics Doctoral Program at Tbilisi State University (*)
2015–2017	DFG project “Classification of non-simple purely infinite C^* -algebras” (with Dr. Rasmus Bentmann) (*)
2009–2014	DFG project “Actions of bigroupoids on C^* -algebras” (with Prof. Dr. Chenchang Zhu) (*)
2008–2017	Research Training Group 1493 “Mathematical Structures in Modern Quantum Physics”, Speaker 2008–2012 and PI 2012–2017 (*)
2010–2014	PI of “Georgian-German partnership in K-theory” (Volkswagen Stiftung)
2007–2014	PI in Courant Research Centre “Higher order structures in Mathematics”

(*) relevant for the current proposal.

Ten selected publications

a) Articles with scientific quality assurance; book publications

- [rm1] Suliman Albandik and Ralf Meyer, *Product systems over Ore monoids*, Doc. Math. **20** (2015), 1331–1402, available at <http://www.math.uni-bielefeld.de/documenta/vol-20/38.html>.
- [rm2] Alcides Buss, Ruy Exel, and Ralf Meyer, *Reduced C^* -algebras of Fell bundles over inverse semigroups*, Israel J. Math. (2016), accepted. arxiv: 1512.05570v2.
- [rm3] Alcides Buss, Ralf Meyer, and Chenchang Zhu, *Non-Hausdorff symmetries of C^* -algebras*, Math. Ann. **352** (2012), no. 1, 73–97, DOI 10.1007/s00208-010-0630-3.
- [rm4] Ivo Dell’Ambrogio, Heath Emerson, and Ralf Meyer, *An equivariant Lefschetz fixed-point formula for correspondences*, Doc. Math. **19** (2014), 141–193, available at <http://www.math.uni-bielefeld.de/documenta/vol-19/05.html>.
- [rm5] Marius Dădărlat and Ralf Meyer, *E-Theory for C^* -algebras over topological spaces*, J. Funct. Anal. **263** (2012), no. 1, 216–247, DOI 10.1016/j.jfa.2012.03.022.

- [rm6] Heath Emerson and Ralf Meyer, *Bivariant K-theory via correspondences*, Adv. Math. **225** (2010), no. 5, 2883–2919, DOI 10.1016/j.aim.2010.04.024.
- [rm7] Bartosz Kosma Kwaśniewski and Ralf Meyer, *Aperiodicity, topological freeness and pure outerness: from group actions to Fell bundles*, Studia Math. (2016), accepted. arxiv: 1611.06954.
- [rm8] Ralf Meyer, *On a representation of the idele class group related to primes and zeros of L-functions*, Duke Math. J. **127** (2005), no. 3, 519–595, DOI 10.1215/S0012-7094-04-12734-4.
- [rm9] Ralf Meyer and Ryszard Nest, *The Baum-Connes conjecture via localisation of categories*, Topology **45** (2006), no. 2, 209–259, DOI 10.1016/j.top.2005.07.001.
- [rm10] Ralf Meyer and Maarten Solleveld, *Resolutions for representations of reductive p-adic groups via their buildings*, J. Reine Angew. Math. **647** (2010), 115–150, DOI 10.1515/CRELLE.2010.075.