Curriculum Vitae

Magdalena Musat

Born May 16, 1970, Romania.

Research interests: Operator algebras, geometric group theory, noncommutative martingales and probability theory, quantum information theory.

Education:

1997	M.Sc., University of Illinois, Urbana-Champaign.
2002	Ph.D., University of Illinois, Urbana-Champaign, advisors: D. Burkholder and M. Junge.

Employment:

2002–2004	S.E. Warschawski Visiting Assistant Professor, University of California, San Diego.
2004–2005	Visiting Assistant Professor, University of California, San Diego.
2005–2009	Assistant Professor, University of Memphis. (On leave 2008–2009.)
2008–2009	Lektor (Associate Professor), University of Southern Denmark.
2009–	Lektor (Associate Professor) tenured 2011, University of Copenhagen.

Honors, grants and awards:

2007–2010	NSF Grant DMS-0703869, amount: USD 93,178.
2009–2011	Freja Stipend, University of Copenhagen.
2009–2011	co-PI on FNU grant *Operator algebras and applications*.
2010–2019	co-PI on grant *Symmetry and Deformation*, the Danish National Research Foundation.
2013–2016	co-PI on FNU grant *Operator Algebras, Dynamical systems and Quantum Information*.
2016–2019	PI on FNU grant *Groups, actions and C^*-algebras*. 2,2 Mkr (joint with M. Rørdam)
2016	DeLong Lecturer, University of Colorado, Boulder.

Academic Leadership:

- Organizer of 9 international conferences and workshops (incl. 5 PhD Masterclasses at the University of Copenhagen).
- Organizer of the Distinguished Harald Bohr Lecture series in Mathematics and of the Department Colloquium at the University of Copenhagen (since 2014).
- Ph.D. students: Tim de Laat (2013), joint with U. Haagerup, currently Postdoctoral Fellow, Dept. of Mathematics, KU Leuven. Current PhD students: Kristian Knudsen Olesen (2016) and Rasmus Sylvester Bryder (2017, expected).
- 7 M.Sc. students, of which, 1 current.
- Postdocs: Christopher Cave (2015–2018).

Selected Invited Talks: 40 invited talks at international conferences and workshops since 2000, including the following:

Free Probability and Non-commutative Banach spaces (MSRI, Berkeley 2001), Canadian Math. Soc. Winter Meeting (Toronto 2001), Southern California Probability Symposium (IPAM, UCLA 2003), Southeastern Analysis Meeting XXII (Gainesville, FL 2006), Noncommutative and matrix-valued analysis (IHP, Paris 2006), Operator Spaces, Non-commutative Lp-spaces and applications (CIRM, Marseille 2007), Fifth East Coast Operator Algebras Symposium (Boston 07), International Workshop on Operator Theory and Applications (Williamsburg 2008), C*-algebren (Mathematisches Forschungsinstitut Oberwolfach 2008, 2010), Noncommutative Geometry and Operator Algebras (Nashville 2010), Thematic Program on Quantum Information Theory (Mittag-Leffler Institute 2010), Great Plains Operator Theory Symposium (Tempe 2011), Conference on C*-algebras and related topics (RIMS, Kyoto 2011), EMS-RSME Joint Mathematical Weekend (Bilbao 2011), Operator structures in quantum information theory (BIRS, Banff 2012), North British Functional Analysis Seminar (Oxford 2012), Workshop on Operator Spaces, Harmonic Analysis and Quantum Probability (Madrid 2013), Special Week on Operator Algebras (Shanghai 2013), Banach Algebras and Applications (Gothenburg 2013), Canadian Operator Algebras Symposium (Toronto 2014), Canadian Operator Algebras Symposium (Waterloo 2015), George Boole Mathematical Sciences Conference (Cork 2015), Mathematical Aspects in Current Quantum Information Theory (Korea 2016).

Publications

Magdalena Musat

1. *On strong Darboux property*, Stud. Cerc. Mat. **44** (1992), no. 4, 305–307.
2. *Interpolation between non-commutative BMO and non-commutative L_p-spaces*, J. Funct. Analysis **202** (2003) 195–225.
3. *The condenser problem*, with J. Bliedtner, Potential Analysis **21** (2004), 177–192.
4. *On the operator space UMD property for noncommutative Lp-spaces*, Indiana Univ. Math. J. **55**, no. 6 (2006), 1857–1892.
5. *A noncommutative version of the John–Nirenberg theorem*, with M. Junge, Trans. Amer. Math. Soc., **359**, no. 1 (2007), 115–142.
6. *On the best constants in noncommutative Khintchine-type inequalities*, with U. Haagerup, J. Funct. Analysis **250**, no. 2, (2007), 588–624.
7. *The Effros-Ruan conjecture for bilinear maps on C^*-algebras*, with U. Haagerup, Inventiones Mathematicae, **174** (2008), 139–163.
8. *Classification of hyperfinite factors up to completely bounded isomorphism of their preduals*, with U. Haagerup, J. Reine Angew. Math., **630** (2009), 141–176.
9. *Factorization and dilation problems for completely positive maps on von Neumann algebras*, with U. Haagerup, Comm. Math. Phys., **303** (2011), 555–594.
10. *An asymptotic property of factorizable completely positive maps and the Connes embedding problem*, with U. Haagerup, Comm. Math. Phys., **338** (2015), 721–752.
11. *Just-infinite C^*-algebras*, with R. Grigorchuk and M. Rørdam, 35 pp., submitted.
12. *Extreme Points of Unital Quantum Channels*, with U. Haagerup and M.B. Ruskai, in preparation.