

Curriculum Vitae

Name	Carlo Morpurgo	
Address	Department of Mathematics, University of Missouri 121 Math. Sciences Bldg. Columbia, Missouri 65211 - USA	
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Email	morpurgoc@missouri.edu	
Education	B.S. Mathematics, Università di Milano, Italy	1986
	Summer School in Mathematics, Perugia, Italy	1986
	Ph.D. Mathematics, Washington University, St. Louis	1993
	Graduate Advisor: Albert Baernstein II, Washington University	
Employment	Military Service, Italy	1986-1987
	Postdoctoral Fellow, Università di Milano, Italy	1994-1995
	R. H. Bing Instructor, University of Texas at Austin	1995-1997
	Assistant Research Professor, Università di Milano, Italy	1997-2000
	Assistant Professor, University of Missouri, Columbia	2000-2002
	Associate Professor, Università di Milano, Italy	2002-2003
	Associate Professor, University of Missouri, Columbia	2002-2013
	Professor, University of Missouri, Columbia	2013-present
Grants	Italian National Board of Research Dissertation Fellowship	1985-1986
	Italian National Board of Research Fellowship (C.N.R. Italy)	1987-1990
	R.H. Bing Fellowship, University of Texas at Austin	1995-1998
	NSF grant no. DMS-9622891, Analysis Program, \$64,498.00	1996-1999
	Summer Research and Research Board, U. of Missouri	2001-2002
	NSF grant no. DMS 0200574, Analysis Program, \$89,997.00	2002-2006
	Simons Foundation Collaborative grant no. 279735, \$35,000	2013-2018
	NSF grant no. DMS-1401035, Analysis Program, \$168,482	2014-2017
Publications	[1] <i>The logarithmic Hardy-Littlewood-Sobolev inequality and extremals of zeta functions on S^n</i> , <i>Geom. and Funct. Anal. (GAFA)</i> 6 (1996), 146-171.	
	[2] <i>Conformal perturbation of heat kernels and their traces</i> , <i>J. Funct. Anal.</i> 141 (1996) 319-334.	

- [3] *Local extrema of traces of heat kernels on S^2* , J. Funct. Anal. 141 (1996), 335-364.
- [4] *Zeta functions on S^2* , Contemporary Mathematics, 201, American Mathematical Society, Providence, RI, 1997, pp. 213-225.
- [5] (with R.S. Laugesen) *Extremals of eigenvalues of the Laplacian under conformal mapping*, J. Funct. Anal., 155 (1998), 64-108.
- [6] (with L. Grafakos) *A Selberg integral formula with applications*, Pacific J. of Math., 191 (1999), 85-94.
- [7] (with E. Laeng) *An uncertainty inequality involving L^1 norms*, Proc. Amer. Math. Soc., 127 (1999), 3565-3572.
- [8] *Sharp trace inequalities for intertwining operators on S^n and \mathbb{R}^n* , Internat. Math. Res. Notices, 20 (1999), 1101-1118.
- [9] *Extremals of some uncertainty inequalities*, Bull. London Math. Soc., 33 (2001), 52-58.
- [10] *Sharp inequalities for functional integrals and traces of conformally invariant operators*, Duke Math. J., 114 (2002), 477-553.
- [11] (with Grafakos L., Laeng E.) *Inequalities for Poisson integrals with slowly growing dimensional constants*, Publ. Math, 51 (2007), 59-75.
- [12] (with Colzani L., Laeng E.), *A rearrangement inequality, and the norm of the Hardy-Littlewood maximal operator on Lorenz and Marcinkiewicz spaces*, J. London Math. Soc., 77 (2008), 349-362.
- [13] (with L. Fontana), *Adams inequalities on measure spaces*, Adv. Math., 226 (2011), 5066-5119, [arXiv:0906.5103](https://arxiv.org/abs/0906.5103).
- [14] (with L. Fontana), *Sharp Moser-Trudinger inequalities for the Laplacian without boundary conditions*, J. Funct. Anal. 262 (2012) 2231-2271, [arXiv:1102.1924](https://arxiv.org/abs/1102.1924)
- [15] (with T. Branson, L. Fontana), *Moser-Trudinger and Beckner-Onofri's inequalities on the CR sphere*, Annals of Math., 177 (2013), 1-52, [arXiv:0712.3905](https://arxiv.org/abs/0712.3905).
- [16] Banks W., Cardon D., Castillo-Garate V., Fontana L., Morpurgo C., *Self-intersections of the Riemann zeta function on the critical line*, J. Math. Anal. Appl., 406 (2013), 475-481. [arXiv:1211.0044](https://arxiv.org/abs/1211.0044)
- [17] (with L. Fontana) *Optimal limiting embeddings for Δ -reduced Sobolev spaces in L^1* , Ann. Inst. H. Poincaré Anal. Non Linéaire, 31 (2014), 217-230, [arXiv:1202.1133](https://arxiv.org/abs/1202.1133).
- [18] (with L. Fontana) *Sharp Adams and Moser-Trudinger inequalities on \mathbb{R}^n and other spaces of infinite measure*, preprint (2015), 56 pages, submitted, [arXiv:1504.04678](https://arxiv.org/abs/1504.04678).

Invited Talks	International Conference in Harmonic Analysis, Pantelleria, Italy	6/1985
	Fourth Midwest Geometry Conference, Iowa City, IA	4/1994
	AMS Meeting, San Francisco, CA	1/1995
	Institute of Advanced Study, Princeton, NJ	1/1995
	Georgia Institute of Technology, Atlanta, GA	4/1995
	University of Iowa, Iowa City, IA	4/1995
	University of Texas, Austin, TX	9/1995
	MSRI, Berkeley, CA	5/1996
	Convegno di Analisi Armonica, Grado, Italy	6/1996
	Odense University, Odense, Denmark	6/1996
	AMS Eastern Sectional Meeting, Lawrenceville, NJ	10/1996
	Washington University, St. Louis, MO	10/1996
	AMS Central Sectional Meeting, Columbia, MO	11/1996
	Nonlinear analysis seminar, University of Milan, Italy	10/1997
	Università di Firenze, Italy	11/1999
	Washington University in St. Louis,	11/2000
	Ecole Normale Supérieure, AMS-SMF meeting, Lyon France	7/2001
	University of Iowa, Iowa City	11/2001
	Washington University, St. Louis	5/2005
	Wayne state university	3/2006
	University of Iowa, Midwest geometry conference	5/2007
	SISSA, Trieste, Italy	7/2007
	Washington University in St. Louis	3/2008
	University of Toronto	4/2008
	University of Illinois, Urbana-Champaign	4/2008
	Università di Bergamo,	7/2009
	San Francisco, CA (Joint AMS meeting, contributed talk)	1/2010
	Lexington, KY (AMS Special Session)	3/2010
	Lincoln, NE (PDE and Harmonic Analysis Conference)	4/2010
	Carthage, Tunisia (Queen Dido conference)	5/2010
	Boca Raton, FL (South Florida Analysis Seminar)	8/2010
	Washington University, St. Louis (analysis seminar)	3/2011
	Princeton University (geometric analysis seminar)	9/2012
	University of Nevada, Las Vegas (AMS Special Session)	4/2015
	University of Washington, Seattle (Joint PDE, Probability, DG seminar)	5/2015
Workshops	MSRI	3/2001
	AIM, Palo Alto	4/2006