

NICOLA GAROFALO

Curriculum Vitae

EDUCATION

Ph. D. in Mathematics, University of Minnesota, 1987

Laurea in Mathematics (Magna cum Laude), University of Bologna, Italy, 1978

RESEARCH INTERESTS

Partial Differential Equations, Harmonic Analysis and Geometry

ACADEMIC APPOINTMENTS

1990-, Professor of Mathematics, Università degli Studi di Padova, Padova, ITALY

1987-89, Associate Professor of Mathematics, Università degli Studi di Bologna, Bologna, ITALY

1980-86, Assistant Professor of Mathematics (with tenure), Università degli Studi di Bologna, Bologna, ITALY

OTHER POSITIONS

- Visiting Professor, Institute Henri Poincaré, Paris, France
- Visiting Fellow, Isaac Newton Institute for Mathematical Sciences, Cambridge, United Kingdom
- Distinguished Visiting Professor of Mathematics, The Ohio State University, Columbus, Ohio, USA
- Professor of Mathematics, Department of Mathematics, Purdue University, West Lafayette, Indiana, USA
- Visiting Professor of Mathematics, Department of Mathematics, The Johns Hopkins University, Baltimore, Maryland, USA
- Visiting Professor, The Mittag-Leffler Institute, The Royal Swedish Academy of Sciences, Stockholm, Sweden
- Visiting Professor of Mathematics, Department of Mathematics, University of Maryland, College Park, Maryland, USA
- Visiting Professor, The Institute for Advanced Study, Princeton, New Jersey, USA
- Assistant Professor of Mathematics, Department of Mathematics, Northwestern University, Evanston, Illinois, USA
- Post Lauream C.N.R. Fellowship, Università degli Studi di Bologna, Bologna, ITALY

TEACHING AWARD

- Recipient of the 2012 USA Ruth and Joel Spira Award for excellence in graduate teaching.

OTHER AWARDS AND HONORS

- 2014, May 26-27: A meeting in honor of N. Garofalo's 60th birthday, Isaac Newton Institute, Cambridge, UK.
- 2013-1989. During these 23 years N. Garofalo has been honored with uninterrupted funding awards by the United States National Science Foundation. In all the awards N. Garofalo has been the exclusive principal investigator.

- 2009 May 26-29: The Fourth Symposium in Analysis and Partial Differential Equations: “On the occasion of the 55th birthday of Nicola Garofalo”, Purdue University. Sponsored by: US National Science Foundation and the Institute for Mathematics and Applications, Univ. of Minnesota.

DEGREE OF SUCCESS IN FUNDING

Funding ID: (Acronyms: NSF = US National Science Foundation, PI = Principal Investigator exclusively responsible for the grant)

2017-2019, University of Padova, SID 2017 (Strategic Departmental Strategic Investment, SID 2017, “Non-local operators in geometry and in free boundary problems, and their connection with the applied sciences”, PI, Euros 20,000

2014-2016, University of Padova, PRAT 2013: “New directions in sub-Riemannian geometry and in the theory of free boundaries”, PI, Euros 23,706

2012, Purdue Research Foundation Grant, *Gradient bounds, monotonicity of the energy for some nonlinear singular diffusion equations, and unique continuation*, PI, \$15,750

2010-2013, NSF grant DMS-1001317: “Monotonicity formulas, nonlinear PDE’s and sub-Riemannian geometry”, PI \$355,767.00

2007-2009, NSF grant DMS-0701001: “Nonlinear partial differential equations in sub-Riemannian geometry”, PI \$336,201.00

2003-2006, NSF grant DMS-0300477: “Some nonlinear problems in analysis and geometry”, PI \$505,719.00

2000-2002, NSF grant DMS-0070492: “Nonlinear equations in analysis and geometry”, PI \$177,000.00

1997-1999, NSF grant DMS-9706892: “Optimal regularity for nonlinear PDE’s and systems in Carnot-Carathéodory spaces and applications to geometry, symmetry for PDE’s, unique continuation”, PI \$110,148.00

1994-1996, NSF grant DMS-9404358: “Unique continuation, regularity of solutions to linear and nonlinear equations of non elliptic type, symmetry for PDE’s”, PI \$ 142,500.00

1991-1993, NSF grant DMS-9104023: “Unique continuation, quantitative properties of solutions and symmetry for PDE’s, PI \$76,350.00

1990, NSF grant DMS-9096158: PI \$20,900.00

1989, NSF grant DMS-8905338: “Symmetry for PDE, Quantitative Properties of Solutions of PDE, and Unique Continuation”, PI \$14,591.00

1984-86, NSF summer research grant (University of Minnesota)

1981-83, Italian CNR, Fellowship for Study Abroad, University of Minnesota

1978-80, Italian CNR, Post-lauream Fellowship, Università di Bologna

AMS, MATHSCINET CITATION INDEX

Cited 2659 times by 1092 authors

EDITORIAL BOARDS:

- Nonlinear Analysis Series A: Theory, Methods & Applications
- Analysis and Geometry in Metric Spaces

- Journal of Dynamical and Control Systems

RECENT INTERNATIONAL INVITATIONS TO TEACH ADVANCED COURSES

2016 (February): Invited to teach a mini-course at Imperial College, London, UK: *Lectures on analysis and geometry in sub-Riemannian spaces*. February 1-4.

2015 (May): Invited by the Sobolev Institute of Mathematics of the Russian Academy of Sciences, Novosibirsk, to teach a three-week course on: *Li-Yau inequalities in sub-Riemannian geometry*.

2014 (September-October): Invited by the École Polytechnique CNRS, Palaiseau, France, to teach a course on: *Curvature-dimension inequalities in sub-Riemannian geometry* at the Institut Henri Poincaré.

2014 (September 1-5): Invited to teach a minicourse on: *Hypoelliptic operators and analysis on Carnot-Carathéodory spaces* at the Summer School CIRM in Marseilles on “Sub-Riemannian manifolds: from geodesics to hypoelliptic diffusion”.

2014 (July 1-4): Invited by the Department of Mathematics, University of Parma, to teach an advanced Ph.D. course in harmonic analysis: *The restriction problem for the Fourier transform and some of its applications*.

2011 (June): Invited by the Scuola Normale Superiore, Pisa, to teach the minicourse: *Curvature-dimension inequalities in sub-Riemannian geometry*, at the *Seventh School on Analysis and Geometry in Metric Spaces*, Levico.