

Nicola Gigli – Curriculum Vitae

Date of birth 06/09/1979

Nationality Italian

Contact details Email: ngigli@sissa.it - Mobile: +39 340 3727296

Address Scala Santa 52, Trieste (TS), 34135, Italy

Academic background

- Full professor at SISSA, Trieste, (May 2016-date)
- Associate professor at SISSA, Trieste, (May 2015-April 2016)
- Lecturer at SISSA, Trieste (November 2014-April 2015)
- Professeur at the Institut de mathématiques de Jussieu, UPMC, Paris, (September 2013-October 2014)
- Chaire d'excellence, Nice (September 2010-August 2013)
- Post doc at the Institute for applied mathematics, Bonn (November 2009-August 2010)
- Post doc at the University of Bordeaux (November 2008- October 2009)
- PhD in Mathematical Analysis with evaluation 70/70 cum laude (September 2008) at Scuola Normale Superiore, Pisa. Title: On the Geometry of the space of probability measures endowed with the quadratic optimal transport distance. Advisor: Luigi Ambrosio
- Degree in Mathematic with evaluation 110/110 cum laude (October 2001) at University of Pisa

Habilitations:

- 'Abilitazione Scientifica Nazionale – settore 01/A3 - Bando 2012': Italian habilitation for full professorship positions.
- 'Habilitation à Diriger des Recherches en Sciences Mathématiques' in November 2011: French habilitation for professorship positions.

Academic awards

- Awarded Scientific Independence of young Researchers (SIR) grant
- Oberwolfach Prize 2010 for excellent achievements in Analysis and Applied Mathematics (shared with L. Székelyhidi)
- Prize “Benedetto Sciarra” for best undergraduate thesis in Mathematic for the years 2000-2001
- Youngest graduate student of University of Pisa with maximum evaluation for the year 2001 (~50.000 students)

Main collaborators:

- Italy. L. Ambrosio (SNS of Pisa, former PhD advisor), A. Figalli (now at UT at Austin), C. Mantegazza (Univ. of Napoli), G. Savaré (Univ. of Pavia)
- France. M. Ledoux (Univ. of Toulouse).
- Germany. F. Otto (MPI of Leipzig), K.-T. Sturm (Hausdorff center of Bonn).
- Japan. K. Kuwada (Tokyo Inst. of Tech.), S.-I. Ohta (Univ. of Kyoto).
- Finland. T. Rajala (Univ. of Jyväskylä).

Other work experiences

Business Analyst at McKinsey&co. (2005-2008)

Languages

- Italian (mother tongue)
- English (fluent)
- French (fluent)

Research projects:

- PI of SIR research grant 'Nonsmooth differential geometry'.
- Team member of the ERC grant Geometric Measure Theory in Non Euclidean Spaces (2008-2014).
- ANR of weak-KAM theory as a post-doc in Bordeaux (2008-09)

Students supervised:

- Graduate students:
 - Bangxian Han (since 2012). PhD obtained in June 2015
 - Luca Tamanini, co-supervised with C. Leonard (since 2014).
 - Chiara Rigoni (since 2014).
 - Enrico Pasqualetto (since 2015)
- Master students:
 - Luca Tamanini, co-supervised with F. Serra Cassano (2013-2014)
 - Alexander Dabrowski (2014-2015)

Conferences organized:

- Hausdorff Trimester Program (HTP), organization of a thematic week, March 2015.
- Analysis and Geometry on singular spaces (with L. Ambrosio and K.-T. Sturm). Pisa 2014. Lecturers: V. Kapovitch, A. Naber, G. Savaré. Speakers: J. Bertrand, M. Erbar, M. Kell, C. Ketterer, T. Rajala, D. Trevisan.
- Geometry meets Transport (with Y. Brenier). September 2011, Nice. Speakers: L. Ambrosio, S. Bianchini, G. Buttazzo, C. De Lellis, J. Delon, A. Figalli, W. Gangbo, N. Ghossoub, V. Guedj, Y. Ollivier, A. Pratelli, T. Riviere, F. Santambrogio, K.-T. Sturm

Invited speaker at (selection of the most recent conferences):

- *January 2016*, Joint AMS-MAA Mathematics Meetings, Seattle (USA)
- *October 2015*, Analysis in Lyon, Lyon (France)
- *February 2015*, Winter school in geometry and analysis in metric spaces, Bonn (Germany)
- *February 2015*, Giornate di lavoro sul calcolo delle variazioni e teoria geometrica della misura, Trento (Italy).
- *September 2014*, New trends in differential geometry, Villasimius (Italy)
- *July 2014*, Calculus of variations, Oberwolfach (Germany)
- *June 2014*, Hausdorff-Kolloquium, Bonn (Germany)
- *March 2014*, Young European Probabilists, Eindhoven (Netherlands)
- *October 2013*, Workshop on inegalites fonctionnelles, courbure synthetique et transport optimal, Grenoble (France)
- *August 2013*, Introductory workshop on optimal transport, MSRI Berkeley (USA)
- *July 2013*, Workshop in global curvature and shape, Munster (Germany)
- *July 2013*, School on geometric measure theory and optimal transport, ICTP (Italy)
- *May 2013*, Heat Kernels, Stochastic Processes and Functional Inequalities, Oberwolfach (Germany)
- *March 2013*, Interactions Between Analysis and Geometry, IPAM, Los Angeles (USA)
- *November 2012*, ERC Workshop on Optimal Transportation and Applications, Pisa (Italy)

- *September 2012*, 6th ICSAA, Bedlewo (Poland)
- *September 2012*, At the frontier of Analysis and Probability, Warwick (UK)
- *June 2012*, Optimal Transport (to) Orsay, Orsay (France)
- *June 2012*, Conference for the centenary of L. V. Kantorovich, S. Petersburg (Russia)
- *March 2012*, Inaugural conference of the Laboratorio Fibonacci, Pisa (Italy)
- *January 2012*, SW PDE winter school, Warwick (UK)
- *October 2011*, ERC conference on analysis in metric spaces, Pisa (Italy)
- *September 2011*, Geometry and Probability, Kumamoto (Japan)
- *September 2011*, Annual meeting of the Mathematical Society of Japan, Fukuoka (Japan)
- *September 2011*. 5th International conference on Stochastic Analysis and Applications, Bonn (Germany)
- *July 2011*. Coloquio Brasileiro de Matematica, Rio de Janeiro (Brazil)
- *June 2011*. Non linear hyperbolic PDEs, dispersive and transport equations, Trieste (Italy)
- *February 2011*. Giornate di lavoro sul calcolo delle variazioni e teoria geometrica della misura, Trento (Italy).
- *November 2010*. Workshop on Geometric Probability and Optimal Transportation, Toronto (Canada)
- *October 2010*. ERC Workshop on Optimal Transportation and Applications, Pisa (Italy)
- *September 2010*. Topics on Optimal Transport, Strasbourg (France)
- *September 2010*. Symposia on Analysis of Geometric Evolution, Austin (Texas, US)
- *May 2010*. Optimal transportation and applications, Banff (Canada)
- *April 2010*. Non linear analysis and PDEs, Austin (Texas, US)
- *February 2010*. Winterschool, Regen (Germany)
- *January 2010*. First joint meeting CIRM-HCM, Levico Terme (Italy)
- *November 2009*. Oberseminar Angewandte Mathematik, Bonn (Germany)
- *October 2009*. “Monge-Kantorovich Optimal transport – Theory and Applications”, Santa Fe (New Mexico, US)
- *September 2009*. “Seventh Meeting on Hyperbolic Conservation Laws and Fluid Dynamics: Recent Results and Research Perspectives”, Trieste - mini course - (Italy)
- *February 2009*. Nice weak KAM theory in Nice, Nice (France).

- *February 2009*. Giornate di lavoro sul calcolo delle variazioni e teoria geometrica della misura, Trento (Italy).
- *February 2009*. “Arbeitsgemeinschaft at Oberwolfach: Optimal Transport and geometry”, Oberwolfach. (Germany)
- *November 2008*. “Optimal Transportation: School and Conference”, Pisa (Italy).