

Dario Trevisan
Curriculum Vitae

Personal Information

Family name: Trevisan
First name: Dario
Date of birth: 15/06/1987
Nationality: Italian

ORCID ID: 0000-0002-4563-5638

Education

2014: PhD degree in Mathematics at Scuola Normale Superiore (SNS). Mark: 70/70 cum Laude.
Supervisors: Luigi Ambrosio, SNS, Maurizio Pratelli, Università degli studi di Pisa (UNIPI).

2011 - 2014	Perfezionamento (PhD) in mathematics.
2006 - 2011	Student at SNS: final grade 70/70.
2009 - 2011	Master in Mathematics - UNIPI (110/110 cum Laude)
2005 - 2009	Bachelor in Mathematics - UNIPI (110/110 cum Laude)

Current Position

Since 12/2021, I am associate professor at Department of Mathematics, UNIPI, in Probability and Statistics (SSD MAT/06).

Previous Positions

2018	-	12/2021Ricercatore TD B at
UNIPI	2015 -	2018Ricercatore TD A at UNIPI
10-		12/2014two months as a Post-doc at SNS.

Fellowships and Awards

I am (ex-aequo) recipient of the *Guido Fubini Prize* 2021.

Grants

I was PI for the INdAM project 2017 *Campi Vettoriali, Superfici e Perimetri in Geometrie Singolari*, total grant: 3600 e, duration 12 months: 03/2017-03/2018.

Organization of Scientific Events

Some of the scientific events I recently co-organized:

- 2022 Workshop *Optimal Transport and Uncertainty II*, University of Naples
 - 2021 Mini-workshop *Optimal Transport and Uncertainty*, UNIFI
 - 2020 Online mini-workshop *Stochastic Analysis Brats*, UNIFI
 - 2019 Workshop *Some topics of Geometric Analysis and Geometric Measure Theory*, at Centro di Ricerca Matematica Ennio de Giorgi, (CRM de Giorgi), Pisa
 - 2018 Mini-workshop *Vector Fields, Surfaces and Perimeters in Singular Geometries*, at Università degli Studi di Ferrara
 - 2017 Summer school *Mathematical Modeling in Life Sciences*, at CRM de Giorgi,
 - 2016 Workshop *Singular Phenomena and Singular Geometries*, UNIFI
- Reviewing activities

I have been referee for numerous journals, including *Annals of Probability*, *Communications in Mathematical Physics*, *Duke Mathematical Journal*, *Journal of Functional Analysis*, *Electronic Journal of Probability*, *Probability Theory and Related Fields*.

Selected talks

Some recent international events where I was invited speaker with at least 45 minutes long talks:

- 2022 ? Workshop *Analysis and Geometry of Point Processes*, Bielefeld (online)
- 2021 ? Workshop *Pathwise Stochastic Analysis and Applications* CIRM, Marseille (online)
- ? Seminar PPGM at Universidade Federal do Amazonas, Manaus (online)
- 2019 ? ESI Workshop 1 on *Optimal Transport: from Geometry to Numerics*, Wien
- ? HSE Miniconference on *Mass Transportation*, Moscow
- ? Stochastic Analysis Seminar, Oxford
- ? Conference *New Directions in Stochastic Analysis: Rough Paths, SPDEs and Related Topics*, Berlin
- 2018 ? Mini-colloquium, *Rough differential calculus and weak geometric structures*, Moscow
- ? 9th International Conference on *Stochastic Analysis and Its Applications*, Bielefeld
- ? Conference *Recent Advances in Random processes*, Rome
- ? Joint Analysis Seminar, Aachen
- ? Conference *Metric & Measure*, Sendai
- 2017 ? Workshop *Rough Paths in Toulouse*, Toulouse

List of selected publications (last 5 years)

2022

1. L. Ambrosio, M. Goldman, D. Trevisan, **On the quadratic random matching problem in two-dimensional domains**, *Electron. J. Probab.* 27: 1-35 (2022) , DOI: 10.1214/22-EJP 784
2. E. Stepanov, D. Trevisan, **On exterior differential systems involving differentials of Hölder functions**, in *Journal of Differential Equations*, DOI: 10.1016 /j.jde. 2022.07.037
3. C. Rigoni, E. Stepanov, D. Trevisan, **Lie brackets of nonsmooth vector fields and commutation of their flows**, to appear in *Journal of the London Mathematical Society*.

2021

4. M. Goldman, D. Trevisan, **Convergence of asymptotic costs for random Euclidean matching problems**, *Probability Theory and Mathematical Physics*, doi: 10.2140 /pmp. 2021.2.121
5. G. De Palma, M. Marvian, D. Trevisan, S. Lloyd, **The Quantum Wasserstein Distance of Order 1**, *IEEE Transactions on Information Theory*, doi: 10.1109/TIT.2021.3076442
6. G. De Palma, D. Trevisan, **Quantum Optimal Transport with Quantum Channels**, *Annales Henri Poincaré*, doi: 10.1007/s00023-021-01042-3

2020

7. E. Stepanov, D. Trevisan, **Towards Geometric Integration of Rough Differ-**

20198. **ential Forms**, *The Journal of Geometric Analysis*, doi:10.1007/s12220-020-00375-5
M. Huesmann, D. Trevisan, **A Benamou-Brenier formulation of martingale optimal transport**, *Bernoulli*, vol. 25, n. 4 A, pp. 2729–2757, doi:10.3150/18bej1069
9. L. Ambrosio, F. Stra, D. Trevisan, **A PDE approach to a 2- dimensional matching problem**, *Probability Theory and Related Fields*, 2019, vol. 173, n. 1-2 , pp. 433-477, doi: 10.1007/s00440-018-0837- x
10. L. Ambrosio, F. Glaudo, D. Trevisan, **On the optimal map in the 2dimensional random matching problem**, *Discrete and Continuous Dynamical Systems- Series A*, 2019, vol. 39, n. 12, pp. 7291-7308, doi: 10.3934 /dcds. 2019304
201811. L. Ambrosio, E. Bru`e, D. Trevisan, **Lusin-type approximation of Sobolev by Lipschitz functions, in Gaussian and $RCD(K,\infty)$ spaces**, *Adv. in Math.*, vol. 339, pp. 426–452, doi: 10.1016 /j.aim. 2018.09.033
12. G. De Palma, D. Trevisan, V. Giovannetti, L. Ambrosio, **Gaussian optimizers for entropic inequalities in quantum information**, *Journal of Math. Physics*, vol. 59, doi: 10.1063/1.5038665
13. G. De Palma, D. Trevisan, V. Giovannetti, **The One-Mode Quantum-Limited Gaussian Attenuator and Amplifier have Gaussian Maximizers**, *Annales Henri Poincar´e*
14. V. Magnani, E. Stepanov, D. Trevisan, **A rough calculus approach to level sets in the Heisenberg group**, *Journal of London Mathematical Society*, (online) doi: 10.1112 /jlms. 12115
15. G. de Palma, D. Trevisan, **The Conditional Entropy Power Inequality for Bosonic Quantum Systems**, *Communications in Mathematical Physics*, n. 360 , p. 639-662, doi: 10.1007/s00220-017-3082-8

Pisa, 06 /10/2022,

Dario Trevisan