

ALLEGATO B

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Giorgio Stefani curriculum vitae

Personal information

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Positions

Feb. 2022 – Jan. 2024	<i>Position</i>	Research Grant Holder (Assegnista di Ricerca)
	<i>Location</i>	Scuola Internazionale Superiore di Studi Avanzati (Italy)
	<i>Supervisor</i>	Luca Rizzi
	<i>Project</i>	ERC Starting Grant 2020 GEOSUB
Feb. 2020 – Jan. 2022	<i>Position</i>	PostDoc Assistant
	<i>Location</i>	Universität Basel (Switzerland)
	<i>Supervisor</i>	Gianluca Crippa
	<i>Project</i>	ERC Starting Grant 2015 FLIRT

Education

13 Feb. 2020	<i>Degree</i>	Ph.D. in Mathematics
	<i>Institution</i>	Scuola Normale Superiore di Pisa (Italy)
	<i>Score</i>	cum laude
	<i>Advisor</i>	Luigi Ambrosio

	<i>Gpa</i>	30/30
Sep. 2016	<i>Degree</i>	Diploma di Chitarra Classica , Vecchio Ordinamento
	<i>Institution</i>	Conservatorio Statale di Musica "A. Buzzolla" di Adria (Italy)
	<i>Maestro</i>	Tommaso De Nardis
	<i>Score</i>	9/10
22 July 2016	<i>Degree</i>	Master of Science in Mathematics
	<i>Institution</i>	Università degli Studi di Padova (Italy)
	<i>Score</i>	110/110 cum laude
	<i>Advisor</i>	Roberto Monti
	<i>Gpa</i>	29.80/30
25 July 2014	<i>Degree</i>	Bachelor of Science in Mathematics
	<i>Institution</i>	Università degli Studi di Padova (Italy)
	<i>Score</i>	110/110 cum laude
	<i>Advisor</i>	Roberto Monti
	<i>Gpa</i>	28.97/30
7 July 2011	<i>Degree</i>	Diploma di Maturità Scientifica
	<i>Institution</i>	Liceo Scientifico Statale "L. Da Vinci" di Treviso (Italy)
	<i>Score</i>	100/100 cum laude

Scholarships and Prizes

July 2020	2nd place "Tullio Levi-Civita" Ph.D. Thesis Prize (1st edition)
June 2017	INdAM Prize for notable M.Sc. thesis in Mathematics
Nov. 2016	Ph.D. Scholarship from Scuola Normale Superiore di Pisa
June 2015	INdAM Scholarship for M.Sc. students in Mathematics
Sep. 2011	INdAM Scholarship for B.Sc. students in Mathematics
May 2011	1st place Prize Poetry Section, Concorso Interprovinciale di Scrittura Liceo Statale "G. Berto" (22nd edition)

Projects

2023	<i>Project</i>	<i>Problemi variazionali per funzionali e operatori non-locali</i>
	<i>PI</i>	G. Stefani
	<i>Members</i>	K. Bessas, D. Carazzato, A. Carbotti, S. Cito, G. E. Comi, A. Kubin, R. Schiattarella
	<i>Founder</i>	INdAM–GNAMPA
	<i>Funding</i>	€ 4.000
2022	<i>Project</i>	<i>Analisi geometrica in strutture subriemanniane</i>
	<i>PI</i>	G. Giovannardi
	<i>Members</i>	D. Barilari, T. Bossio V. Franceschi, R. Monti, F. Serra Cassano, G. Stefani, D. Vittone
	<i>Founder</i>	INdAM–GNAMPA
	<i>Funding</i>	€ 4.500
2020	<i>Project</i>	<i>Problemi isoperimetrici con anisotropie</i>

	<i>PI</i>	G. Saracco
	<i>Members</i>	V. Franceschi, G. P. Leonardi, A. Pratelli, V. Scattaglia
	<i>Founder</i>	INdAM–GNAMPA
	<i>Funding</i>	€ 1.800
2019	<i>Project</i>	Problemi isoperimetrici in spazi Euclidei e non
	<i>PI</i>	G. Saracco
	<i>Members</i>	V. Franceschi, G. P. Leonardi, A. Pratelli, V. Scattaglia
	<i>Founder</i>	INdAM–GNAMPA
	<i>Funding</i>	€ 3.000
2018	<i>Project</i>	Sub-Riemannian soap bubbles
	<i>Members</i>	V. Franceschi, G. Stefani
	<i>Founder</i>	IHP Grant 'Research in Paris'
	<i>Funding</i>	€ 1.000

Memberships

since 2015 [Istituto Nazionale di Alta Matematica \(INdAM\)](#)
[Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni \(GNAMPA\)](#)

Visits

Apr. 2023	<i>Institution</i>	Université Catholique de Louvain (Belgium)
	<i>Project</i>	Distributional fractioanal spaces and fractional PDEs
	<i>Coordinator</i>	S. Buccheri
	<i>Collaborator</i>	G. E. Comi
Feb. 2023	<i>Institution</i>	University of Napoli 'Federico II' (Italy)
	<i>Project</i>	Monotonicity of non-local perimeter on nested convex sets
	<i>Collaborator</i>	F. Giannetti
Dec. 2022	<i>Institution</i>	University of Padova (Italy)
	<i>Project</i>	Minimal surfaces and harmonic functions in sub-R spaces
	<i>Coordinator</i>	R. Monti
	<i>Collaborators</i>	V. Franceschi, A. Socionovo
Oct. 2022	<i>Institution</i>	Università Sapienza di Roma (Italy)
	<i>Project</i>	Distributional fractional Laplacian and applications
	<i>Coordinator</i>	F. Petitta
	<i>Collaborators</i>	F. Petitta, G. E. Comi
Jul. 2022	<i>Institution</i>	University of Vienna (Austria)
	<i>Project</i>	Distributional fractional spaces and fractional PDEs
	<i>Coordinator</i>	S. Buccheri
	<i>Collaborators</i>	S. Buccheri, G. E. Comi
Apr. 2022	<i>Institution</i>	University of Padova (Italy)
	<i>Project</i>	Minimal surfaces in weighted spaces
	<i>Coordinator</i>	V. Franceschi

	<i>Collaborators</i>	R. Monti, A. Socionovo
Dec. 2021	<i>Institution</i>	University of Trento (Italy)
	<i>Project</i>	Properties and regularity of H -minimal surfaces and Cheeger sets in sub-Riemannian manifolds
	<i>Coordinator</i>	A. Pinamonti
	<i>Collaborators</i>	A. Pinamonti, G. Saracco
Nov. 2021	<i>Institution</i>	University of Pisa (Italy)
	<i>Project</i>	Proprietà fini e disuguaglianze di interpolazione per funzioni a variazione frazionaria finita
	<i>Coordinator</i>	G. Alberti
	<i>Collaborator</i>	G. E. Comi
Sep. 2021	<i>Institution</i>	University of Padova (Italy)
	<i>Project</i>	Isoperimetric problem on almost-Riemannian manifolds
	<i>Collaborator</i>	V. Franceschi
Dec. 2019	<i>Institution</i>	University of Padova (Italy)
	<i>Coordinator</i>	P. Musolino
Apr. 2019	<i>Institution</i>	Universität Basel (Switzerland)
	<i>Coordinator</i>	G. Crippa
Nov. – Dec. 2018	<i>Institution</i>	Institut Henri Poincaré (IHP) Paris (France)
	<i>Project</i>	IHP Research in Paris <i>Sub-Riemannian soap bubbles</i>
	<i>Collaborator</i>	V. Franceschi

Research description

I work in the field of Mathematical Analysis, with a particular interest in Calculus of Variations, Geometric Measure Theory, Optimal Transport and Partial Differential Equations. My research mainly deals with the following topics:

- regularity of minimal surfaces in sub-Riemannian spaces;
- isoperimetric and cluster problems for perimeter and volume with densities;
- non-local Sobolev and BV spaces;
- curvature properties of spaces, linked to heat and entropic flows;
- flows of non-smooth velocity fields and (incompressible) Euler equations.

I have **20 coauthors**: [L. Ambrosio](#), [K. Bessas](#), [E. Bruè](#), [M. Calzi](#), [G. E. Comi](#), [G. Crippa](#), [L. De Rosa](#), [V. Franceschi](#), [F. Giannetti](#), [M. Inversi](#), [P. D. Lamberti](#), [M. Latocca](#), [R. Monti](#), [Q.-H. Nguyen](#), [A. Pinamonti](#), [A. Pratelli](#), [L. Rizzi](#), [G. Saracco](#), [C. Saffirio](#) and [D. Spector](#). My Erdős number is 3.

Publications (all available on arXiv and CvGmt)

Submitted

- [8] G. Crippa, M. Inversi, C. Saffirio and G. Stefani, *Existence and stability of weak solutions of the Vlasov–Poisson system in localized Yudovich spaces* (2023). Submitted paper. Preprint available at [arXiv:2306.00523](#).
- [7] G. E. Comi and G. Stefani, *On sets with finite distributional fractional perimeter* (2023). Submitted paper. Preprint available at [arXiv:2303.10989](#).

- [6] M. Inversi and G. Stefani, *Lagrangian stability for a system of non-local continuity equations under Osgood condition* (2023). Submitted paper. Preprint available at [arXiv:2301.11822](https://arxiv.org/abs/2301.11822).
- [5] L. De Rosa, M. Latocca and G. Stefani, *Full double Hölder regularity of the pressure in bounded domains* (2023). Submitted paper. Preprint available at [arXiv:2301.06482](https://arxiv.org/abs/2301.06482).
- [4] L. Rizzi and G. Stefani, *Failure of curvature-dimension conditions on sub-Riemannian manifolds via tangent isometries* (2023). Submitted paper. Preprint available at [arXiv:2301.00735](https://arxiv.org/abs/2301.00735).
- [3] K. Bessas and G. Stefani, *Non-local BV functions and a denoising model with L^1 fidelity* (2022). Submitted paper. Preprint available at [arXiv:2210.11958](https://arxiv.org/abs/2210.11958).
- [2] V. Franceschi, A. Pinamonti, G. Saracco and G. Stefani, *The Cheeger problem in abstract measure spaces* (2022). Submitted paper. Preprint available at [arXiv:2207.00482](https://arxiv.org/abs/2207.00482).
- [1] G. Crippa and G. Stefani, *An elementary proof of existence and uniqueness for the Euler flow in localized Yudovich spaces* (2021). Submitted paper. Preprint available at [arXiv:2110.15648](https://arxiv.org/abs/2110.15648).

Accepted

- [1] G. E. Comi and G. Stefani, *Fractional divergence-measure fields, Leibniz rule and Gauss-Green formula* (2023). Accepted paper, to appear on Boll. Unione Mat. Ital. Preprint available at [arXiv:2303.00834](https://arxiv.org/abs/2303.00834).

Published

- [19] L. De Rosa, M. Inversi and G. Stefani, *Weak-strong uniqueness and vanishing viscosity for incompressible Euler equations in exponential spaces*, J. Differ. Equ. **366** (2023), 833–861. DOI [10.1016/j.jde.2023.05.019](https://doi.org/10.1016/j.jde.2023.05.019). Preprint available at [arXiv:2204.12779](https://arxiv.org/abs/2204.12779).
- [18] V. Franceschi, A. Pratelli and G. Stefani, *On the Steiner property for planar minimizing clusters. The anisotropic case*. J. Éc. polytech. Math. **10** (2023), 989–1045. DOI [10.5802/jep.238](https://doi.org/10.5802/jep.238). Preprint available at [arXiv:2106.08099](https://arxiv.org/abs/2106.08099).
- [17] G. E. Comi and G. Stefani, *Failure of the local chain rule for the fractional variation*. Port. Math. (2023). DOI [10.4171/PM/2096](https://doi.org/10.4171/PM/2096). Preprint available at [arXiv:2206.03197](https://arxiv.org/abs/2206.03197).
- [16] L. De Rosa, M. Latocca and G. Stefani, *On double Hölder regularity of the hydrodynamic pressure in bounded domains*, Calc. Var. Partial Differ. Equ. **62** (2023), no. 3. Paper No. 85, 31 pp. DOI [10.1007/s00526-023-02432-7](https://doi.org/10.1007/s00526-023-02432-7). Preprint available at [arXiv:2205.00929](https://arxiv.org/abs/2205.00929).
- [15] F. Giannetti and G. Stefani, *On the convex components of a set in \mathbb{R}^n* . Forum Math. **35** (2023), no. 1, 187–199. DOI [10.1515/forum-2022-0203](https://doi.org/10.1515/forum-2022-0203). Preprint available at [arXiv:2106.08725](https://arxiv.org/abs/2106.08725).
- [14] V. Franceschi, A. Pratelli and G. Stefani, *On the Steiner property for planar minimizing clusters. The isotropic case*, Commun. Contemp. Math. **25** (2023), no. 5, Paper No. 2250040, 29 pp. DOI [10.1142/S0219199722500407](https://doi.org/10.1142/S0219199722500407). Preprint available at [arXiv:2106.08103](https://arxiv.org/abs/2106.08103).
- [13] A. Pinamonti and G. Stefani, *Existence and uniqueness theorems for some semi-linear equations on locally finite graphs*, Proc. Amer. Math. Soc. **150** (2022), no. 11, 4757–4770. DOI [10.1090/proc/16046](https://doi.org/10.1090/proc/16046). Preprint available at [arXiv:2106.10447](https://arxiv.org/abs/2106.10447).
- [12] G. E. Comi and G. Stefani, *A distributional approach to fractional Sobolev spaces and fractional variation: Asymptotics I*, Rev. Mat. Complut. (2022). DOI [10.1007/s13163-022-00429-y](https://doi.org/10.1007/s13163-022-00429-y). Preprint available at [arXiv:1910.13419](https://arxiv.org/abs/1910.13419).

- [11] E. Bruè, M. Calzi, M. Comi and G. Stefani, *A distributional approach to fractional Sobolev spaces and fractional variation: Asymptotics II*, C. R. Math. Acad. Sci. Paris **360** (2022), 589–626. DOI [10.5802/crmath.300](https://doi.org/10.5802/crmath.300). Preprint available at [arXiv:2011.03928](https://arxiv.org/abs/2011.03928).
- [10] G. E. Comi, D. Spector and G. Stefani, *The fractional variation and the precise representative of $BV^{\alpha,p}$ functions*, Fract. Calc. Appl. Anal. **25**, 520–558 (2022). DOI [10.1007/s13540-022-00036-0](https://doi.org/10.1007/s13540-022-00036-0). Preprint available at [arXiv:2109.15263](https://arxiv.org/abs/2109.15263).
- [9] G. E. Comi and G. Stefani, *Leibniz rules and Gauss–Green formulas in distributional fractional spaces* J. Math. Anal. Appl. **514** (2022), no. 2, 126312. DOI [10.1016/j.jmaa.2022.126312](https://doi.org/10.1016/j.jmaa.2022.126312). Preprint available at [arXiv:2111.13942](https://arxiv.org/abs/2111.13942).
- [8] G. Stefani, *Generalized Bakry–Émery curvature condition and equivalent entropic inequalities in groups*, J. Geom. Anal. **32** (2022), no. 4, 136. DOI [10.1007/s12220-021-00762-6](https://doi.org/10.1007/s12220-021-00762-6). Preprint available at [arXiv:2008.13731](https://arxiv.org/abs/2008.13731).
- [7] L. Ambrosio and G. Stefani, *Heat and entropy flows in Carnot groups*, Rev. Mat. Iberoam. **36** (2020), no. 1, 257–290. DOI [10.4171/rmi/1129](https://doi.org/10.4171/rmi/1129). Preprint available at [arXiv:1801.01300](https://arxiv.org/abs/1801.01300).
- [6] V. Franceschi and G. Stefani, *Symmetric double bubbles in the Grushin plane*, ESAIM Control Optim. Calc. Var. **25** (2019), Art. 77, 37. DOI [10.1051/cocv/2018055](https://doi.org/10.1051/cocv/2018055). Preprint available at [arXiv:1801.00314](https://arxiv.org/abs/1801.00314).
- [5] E. Bruè, Q.-H. Nguyen and G. Stefani, *A maximal function characterisation of absolutely continuous measures and Sobolev functions*, Atti Accad. Naz. Lincei Rend. Mat. Appl. **30** (2019), no. 3, 599–614. DOI [10.4171/RLM/862](https://doi.org/10.4171/RLM/862). Preprint available at [arXiv:1807.08266](https://arxiv.org/abs/1807.08266).
- [4] G. E. Comi and G. Stefani, *A distributional approach to fractional Sobolev spaces and fractional variation: Existence of blow-up*, J. Funct. Anal. **277** (2019), no. 10, 3373–3435. DOI [10.1016/j.jfa.2019.03.011](https://doi.org/10.1016/j.jfa.2019.03.011). Preprint available at [arXiv:1809.08575](https://arxiv.org/abs/1809.08575).
- [3] G. Stefani, *On the monotonicity of perimeter of convex bodies*, J. Convex Anal. **25** (2018), no. 1, 93–102. Preprint available at [arXiv:1801.00314](https://arxiv.org/abs/1801.00314).
- [2] R. Monti and G. Stefani, *Improved Lipschitz approximation of H -perimeter minimizing boundaries*, J. Math. Pures Appl. (9) **108** (2017), no. 3, 372–398. DOI [10.1016/j.matpur.2017.04.002](https://doi.org/10.1016/j.matpur.2017.04.002). Preprint available at [arXiv:1612.00263](https://arxiv.org/abs/1612.00263).
- [1] P. D. Lamberti and G. Stefani, *Sobolev subspaces of nowhere bounded functions*, Real Anal. Exchange **41** (2016), no. 2, 367–375. URL euclid.rae/1490839338. Preprint available at [arXiv:1605.00233](https://arxiv.org/abs/1605.00233).

Scientific communications

Conference talks

- [11] A distributional approach to fractional Sobolev and BV spaces, [NonPUB23 - Nonlocal and Nonlinear Partial Differential Equations at the University of Bologna](#), Bologna, June 9, 2023 ([slides](#))
- [10] Double Hölder regularity of the hydrodynamic pressure in bounded domains, [Recent Advances in Nonlinear Partial Differential Equations](#), Catania, May 26, 2023 ([slides](#))
- [9] Non-local BV functions and a denoising model with L^1 fidelity, [Shape Optimization, Geometric Inequalities, and Related Topics Two days workshop for young researchers in Naples](#), Napoli, January 31, 2023 ([slides](#))

- [8] An abstract approach to the Cheeger problem and applications, *Anisotropic isoperimetric problems & related topics*, Rome, 8 September 2022 ([slides](#))
- [7] Bakry–Émery curvature condition and entropic inequalities on metric-measure groups, *AMS-SMF-EMS Joint International Meeting 2022, Special session in Sub-Riemannian Geometry*, Grenoble, July 21, 2022 ([slides](#), [online](#))
- [6] A distributional approach to fractional Sobolev spaces and fractional variation, *100 years Unione Matematica Italiana – 800 years Università di Padova, First UMI meeting of Ph.D. students*, Padova, May 26, 2022 ([slides](#))
- [5] A distributional approach to fractional Sobolev spaces and fractional variation: asymptotic analysis, *XXX Convegno Nazionale di Calcolo delle Variazioni*, Levico Terme, February 3, 2020 ([slides](#))
- [4] A distributional approach to fractional Sobolev spaces and fractional variation, *International Conference on Elliptic and Parabolic Problems, Mini-symposium “Regularity in Nonlinear Elasticity”*, Gaeta, May 24, 2019 ([slides](#))
- [3] Heat and entropy flows in Carnot groups, *Vector Fields, Surfaces and Perimeters in Singular Geometries*, Ferrara, February 28, 2018 ([slides](#))
- [2] Improved Lipschitz approximation on H -perimeter minimizing boundaries, *XXVII Convegno Nazionale di Calcolo delle Variazioni*, Levico Terme, February 6, 2017 ([slides](#))
- [1] On the monotonicity of perimeter of convex bodies, *Workshop on Calculus of Variations and Nonlinear PDEs with a special tribute to Francesco Leonetti on the occasion of his 60th birthday*, Università degli Studi del Sannio, Benevento, November 17, 2016 ([slides](#))

Seminars

- [14] A distributional approach to fractional Sobolev and BV functions I, Analysis/PDEs Seminar, Université Catholique de Louvain, Louvain-la-Neuve, April 18, 2023 ([slides](#))
- [13] Bakry–Émery curvature condition and entropic inequalities on metric-measure groups, *SISSA Analysis Junior Seminars 2021–2022*, Trieste, June 10, 2022 ([slides](#))
- [12] An elementary proof of existence and uniqueness for the Euler flow in localized Yudovich spaces, *Nonlinear Analysis Seminar Series*, Taiwan, March 15, 2022 ([online](#), [slides](#), [video](#))
- [11] Bakry–Émery curvature condition and entropic inequalities on metric-measure groups, *Analysis Seminar*, Trento, December 2, 2021 ([slides](#))
- [10] An elementary proof of existence and uniqueness for the Euler flow in localized Yudovich spaces, *Corona Seminars*, November 24, 2021 ([online](#), [slides](#))
- [9] On the convex components of a set, *Seminari M.A.P.*, Pisa, November 18, 2021 ([notes](#))
- [8] An elementary proof of existence and uniqueness for the Euler flow in localized Yudovich spaces, Pisa (SNS), November 17, 2021 (hybrid, [slides](#))
- [7] A distributional approach to fractional spaces and fractional variation, Ferrara, March 4, 2021 ([online](#), [slides](#))
- [6] Bakry–Émery curvature condition and entropic inequalities on metric-measure groups, Hamburg, December 16, 2020 ([online](#), [slides](#))
- [5] A distributional approach to fractional Sobolev spaces and fractional variation, Ph.D. defense in SNS, Pisa, February 13, 2020 ([slides](#))

- [4] A distributional approach to fractional Sobolev spaces and fractional variation: asymptotic analysis, Analysis seminar, Padova, December 11, 2019 ([slides](#))
- [3] A distributional approach to fractional Sobolev spaces and fractional variation, Basel, April 24, 2019 ([slides](#))
- [2] Carnot groups from an RCD point of view: heat, entropy and their properties, Seminario Dottorandi SNS, Pisa, January 21, 2019 ([slides](#))
- [1] Archimedes, a dinner and a theorem - A divertissement on the monotonicity of perimeter, *Seminari M.A.P.*, Pisa, April 24, 2018 ([notes](#))

Workshops

Planned

- [3] [Brescia–Trento Nonlinear Day, Fourth Edition](#), Brescia (Italy), September 29, 2023
- [2] [Conference in honour of Luigi Ambrosio's 60th birthday](#), Zurich (Switzerland), September 11–15, 2023
- [1] [Calculus of Variations & Geometric Measure Theory](#), *celebrating the 60th birthday of Luigi Ambrosio*, Pisa (Italy), June 12–16, 2023

Attended

- [36] [NonPUB23 - Nonlocal and Nonlinear Partial Differential Equations at the University of Bologna](#), Bologna (Italy), June 8–9, 2023
- [35] [Recent Advances in Nonlinear Partial Differential Equations](#), Catania (Italy), May 24–26, 2023
- [34] [XXXII Convegno Nazionale di Calcolo delle Variazioni](#), Levico Terme (Italy), May 8–12, 2023
- [33] [Geometry and Control in Florence](#), *in honor of Andrei Agrachev's 70th birthday*, Cortona (Italy), March 27–31, 2023
- [32] [Shape Optimization, Geometric Inequalities, and Related Topics](#), *Two days workshop for young researchers in Naples*, Napoli (Italy), January 30–31, 2023
- [31] [Workshop on Singular Perturbations and Geometric Structures](#), Trieste (Italy), November 21–23, 2022
- [30] [Anisotropic isoperimetric problems and related topics](#), Rome (Italy), September 5–9, 2022
- [29] [AMS-SMF-EMS Joint International Meeting 2022](#), *Special session in Sub-Riemannian Geometry*, Grenoble (France), July 20–22, 2022 (attended remotely during quarantine)
- [28] [Geometric Analysis in Metric Measure Spaces](#), *Two days in honor of Bruno Franchi and Raul Serapioni*, Levico Terme, June 30 – July 1, 2022
- [27] [12th School on Analysis and Geometry in Metric Spaces](#), Levico Terme (Italy), June 27–29, 2022
- [26] [Isoperimetric problems](#), Pisa (Italy), June 20–24, 2022
- [25] [100 years Unione Matematica Italiana – 800 years Università di Padova](#), Padova (Italy), May 23–27, 2022
- [24] [XXXI Convegno Nazionale di Calcolo delle Variazioni](#), Levico Terme (Italy), May 9–13, 2022

- [23] [Transport, Fluids and Mixing](#), Pisa (Italy), January 24–28, 2022 (online)
- [22] [Recent Progress in Geometric Analysis and PDEs](#) for the 70th birthday of Bruno Franchi, Bologna (Italy), September 16–18, 2021
- [21] [PaPa - Padua Paris Sub-Riemannian seminar](#), Padova (Italy), September 6–7, 2021
- [20] [XXX Convegno Nazionale di Calcolo delle Variazioni](#), Levico Terme (Italy), February 3–7, 2020
- [19] [Shape Optimization and Isoperimetric and Functional Inequalities](#), Levico Terme (Italy), September 23–27, 2019
- [18] [International Conference on Elliptic and Parabolic Problems](#), Gaeta (Italy), May 20–24, 2019
- [17] [Some topics of Geometric Analysis and Geometric Measure Theory](#), Pisa (Italy), April 16–17, 2019
- [16] [Optimal Transport and Geometric Analysis](#), Venezia (Italy), April 1–5, 2019
- [15] [XXIX Convegno Nazionale di Calcolo delle Variazioni](#), Levico Terme (Italy), February 4–8, 2019
- [14] [Optimal Transport and Applications](#), Scuola Normale Superiore, Pisa (Italy), November 12–16, 2018
- [13] [A Sub-Riemannian Day in Padova](#), Padova (Italy), September 14, 2018 (organized in collaboration with V. Franceschi and D. Vittone)
- [12] [Vector Fields, Surfaces and Perimeters in Singular Geometries](#), Ferrara (Italy), February 27–28, 2018
- [11] [XXVIII Convegno Nazionale di Calcolo delle Variazioni](#), Levico Terme (Italy), February 12–16, 2018
- [10] [Sub-Riemannian Geometry Harmonic Analysis, PDE and Applications](#), Bologna (Italy), January 24–27, 2018
- [9] [Recent Advances in PDEs and the Calculus of Variations](#), Venezia (Italy), July 3–6, 2017
- [8] [CIME-CIRM Course on New Trends on Analysis and Geometry in Metric Spaces](#) (10th School), Levico Terme (Italy), June 26–30, 2017
- [7] [XXVII Convegno Nazionale di Calcolo delle Variazioni](#), Levico Terme (Italy), February 6–10, 2017
- [6] [Workshop on Calculus of Variations and Nonlinear PDEs](#) with a special tribute to Francesco Leonetti on the occasion of his 60th birthday, Università degli Studi del Sannio, Benevento (Italy), November 16–18, 2016
- [5] [Optimal Transport and Applications](#), Scuola Normale Superiore, Pisa (Italy), November 7–11, 2016
- [4] [Mini-courses in Mathematical Analysis](#), Università di Padova, Padova (Italy) June 27 – July 1, 2016
- [3] [Singular Phenomena and Singular Geometries](#), Università di Pisa, Pisa (Italy), June 20–23, 2016
- [2] [Two-day Meeting on linear and nonlinear PDEs](#) in honour of the 65th birthday of Cristian Gutierrez, Accademia delle Scienze, Bologna (Italy), June 9–10, 2016
- [1] [XXVI Convegno Nazionale di Calcolo delle Variazioni](#), Levico Terme (Italy), January 18–22, 2016

Organized Activities

Workshops

- [2] [Frontiers in Sub-Riemannian Geometry](#), Centre International de Rencontres Mathématiques (CIRM), Marseille (France), November 25–29, 2024 (with S. Borza and F. Chittaro, L. Rifford, L. Sacchelli)
- [1] [A Sub-Riemannian Day in Padova](#), Dipartimento di Matematica “Tullio Levi Civita”, Università degli Studi di Padova, Padova (Italy), September 14, 2018 (with V. Franceschi and D. Vittone)

Seminars

- [6] Giovanni E. Comi, *Fractional Leibniz rules and Gauss-Green formulas*, SISSA, Trieste, May 3, 2022 (with L. Rizzi)
- [5] Gioacchino Antonelli, *The isoperimetric problem on spaces with curvature bounded from below*, Universität Basel, Basel, November 24, 2021 (online, with G. Crippa)
- [4] Simone Cito, *Shape optimization of Robin eigenvalues with negative boundary parameter*, Scuola Normale Superiore di Pisa, Pisa, December 5, 2019 (with L. Ambrosio)
- [3] Sebastiano Don, *Fine properties of BV functions in Carnot-Carathéodory spaces*, Scuola Normale Superiore di Pisa, Pisa, October 17, 2019 (with L. Ambrosio and G. Antonelli)
- [2] Valentina Franceschi, *Hardy inequalities in the Heisenberg group*, Scuola Normale Superiore di Pisa, Pisa, June 24, 2019, (with L. Ambrosio)
- [1] Valentina Franceschi, *On the essential self-adjointness of sub-Laplacians*, Scuola Normale Superiore di Pisa, Pisa, January 21, 2019 (with L. Ambrosio)

Teaching Activities

Sep. 2021 – Feb. 2022	<i>Role</i>	Teaching assistant
	<i>Institution</i>	Universität Basel
	<i>Coordinator</i>	C. Saffirio
	<i>Course</i>	Real Analysis (in English)
	<i>Type</i>	2nd year course in Analysis, 1st semester
	<i>Meeting</i>	2 hours per week (hybrid: onsite/online via Zoom)
	<i>Exercises</i>	preparation and correction of weekly exercise sheets
Sep. 2020 – Feb. 2021	<i>Role</i>	Lecturer
	<i>Institution</i>	Universität Basel
	<i>Course</i>	Real Analysis (in English)
	<i>Type</i>	2nd year course in Analysis, 1st semester
	<i>Lectures</i>	4 hours per week
	<i>Topics</i>	metric spaces, measure theory, measurable functions and integration, product measures and Fubini–Tonelli’s Theorem, L^p spaces
	<i>Exercises</i>	preparation of weekly exercise sheets
Feb. 2020 – Jun. 2020	<i>Role</i>	Teaching assistant
	<i>Institution</i>	Universität Basel
	<i>Coordinator</i>	E. Lenzmann

	<i>Course</i>	Analysis II (in German/English)
	<i>Type</i>	2nd year course in Analysis, 2nd semester
	<i>Meetings</i>	2 hours per week
	<i>Exercises</i>	correction of weekly exercise sheets
Oct. 2017 – Jul. 2018	<i>Role</i>	Teaching assistant
	<i>Institution</i>	Scuola Normale Superiore di Pisa (Italy)
	<i>Coordinator</i>	F. Ricci
	<i>Course</i>	Complementi di Matematica (in Italian)
	<i>Type</i>	1st year course in Analysis, two semesters
	<i>Meetings</i>	2 hours per week
Oct. 2016 – Jul. 2017	<i>Role</i>	Teaching assistant
	<i>Institution</i>	Scuola Normale Superiore di Pisa
	<i>Coordinator</i>	F. Ricci
	<i>Course</i>	Complementi di Matematica (in Italian)
	<i>Type</i>	1st year course in Analysis, two semesters
	<i>Meetings</i>	2 hours per week

Referee Activity

I refereed **12 papers** for the following journals: Advances in Nonlinear Analysis; Applied and Computational Harmonic Analysis (ACHA); Applied Mathematics – A Journal of Chinese Universities; Calculus of Variation and Partial Differential Equations; Journal d'Analyse Mathématique; Journal of Mathematical Analysis and Applications; Mathematics in Engineering; Portugaliae Mathematica; Proceedings of the 8th ECM; Proceedings of the Edinburgh Mathematical Society; SIAM Journal on Mathematical Analysis.

Languages

<i>Italian</i>	Mothertongue
<i>English</i>	Fluent
<i>French</i>	Basic/Scientific Knowledge
<i>German</i>	Basic Knowledge

Computer Skills

<i>Operating Systems</i>	Linux, Mac OS, Windows
<i>Programming</i>	Brakke's Surface Evolver, L ^A T _E X, Mathematica
<i>Meetings</i>	GMeet, Skype, Telegram, WhatsApp, Zoom
<i>Collaborating</i>	Dropbox, Overleaf, Slack

References

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