

Luca Battaglia

Curriculum Vitae et Studiorum



Personal data

Full name Luca Battaglia.
Date of birth January 2nd 1988.
Place of birth Rome, Italy.
Citizenship Italian.
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Present position

02/2023 - Associate professor in Mathematical Analysis, Department of Mathematics and Physics, Roma Tre University.

Previous positions

02/2020 - 01/2023 Tenure track assistant professor in Mathematical Analysis, Department of Mathematics and Physics, Roma Tre University.
07/2017 - 01/2020 Non-tenure track assistant professor in Mathematical Analysis, Department of Mathematics and Physics, Roma Tre University.
06/2017 - 07/2017 Post-doctoral position, University of Basel;
Supervisor: Prof. Luca Martinazzi.
06/2016 - 05/2017 Post-doctoral position, Sapienza University of Rome;
Supervisor: Prof. Massimo Grossi.
10/2015 - 05/2016 Post-doctoral position, Université catholique de Louvain;
Supervisor: Prof. Jean Van Schaftingen.

Education

10/2011 - 09/2015 Ph.D. in Mathematical Analysis, International School for Advanced Studies (S.I.S.S.A., Trieste);
Thesis title: “Variational aspects of singular Liouville systems”;
Supervisor: Prof. Andrea Malchiodi (Scuola Normale Superiore, Pisa);
Final mark: *cum laude*.
09/2009 - 07/2011 Master’s Degree in Mathematics, Roma Tre University;
Thesis title: “Sobolev embeddings in the limiting case and exponential integrability”;
Supervisor: Prof. Gianni Mancini;
Final mark: 110/110 *cum laude*.
09/2006 - 07/2009 Bachelor’s Degree in Mathematics, Roma Tre University;
Final mark: 110/110 *cum laude*.

09/2001 - 07/2006 Scientific high school degree, Computer Science curriculum, Liceo Scientifico Statale “Aristotele”, Rome;
Final Mark: 100/100.

Research interests

My research activity mainly deals with nonlinear elliptic partial differential equations.

In particular, I am interested in:

- Liouville-type equations with exponential nonlinearities in dimension two;
- Moser-Trudinger type inequalities;
- Prescribed curvature problems on surfaces with boundary;
- Problems with nonlinear Neumann boundary conditions;
- Choquard-type equations with non-local nonlinearities.

Scientific publications

- [29] *Infinitely many solutions for a boundary Yamabe problem* (with Yixing Pu and Giusi Vaira), submitted (<http://www.arxiv.org/abs/2503.06192>).
- [28] *Prescribing curvatures on surfaces with conical singularities and corners* (with Francisco Javier Reyes Sánchez), submitted (<http://www.arxiv.org/abs/2502.15976>).
- [27] *New solutions for the Lane-Emden problem in planar domains* (with Isabella Ianni and Angela Pistoia), submitted (<http://www.arxiv.org/abs/2407.15742>).
- [26] *On the critical points of Steklov eigenfunctions* (with Angela Pistoia and Luigi Provenzano), accepted, Ann. Mat. Pura Appl. (<http://www.arxiv.org/abs/2402.01190>).
- [25] *A mean field problem approach for the double curvature prescription problem* (with Rafael López Soriano), Commun. Contemp. Math., accepted (<http://www.arxiv.org/abs/2309.07735>).
- [24] *Prescribing nearly constant curvatures on spheres* (with Sergio Cruz Blázquez, Angela Pistoia), Proc. Roy. Soc. Edinburgh Sect. A, accepted (<http://www.arxiv.org/abs/2305.09622>).
- [23] *On the shape of solutions to elliptic equations in possibly non convex domains* (with Fabio De Regibus, Massimo Grossi), Discrete Contin. Dyn. Syst. Ser. S 17 (2024), no. 4, 1588-1598 (<http://www.arxiv.org/abs/2301.08098>).
- [22] *Non uniqueness for the nonlocal Liouville equation in \mathbf{R} and applications* (with Matteo Cozzi, Antonio J. Fernández, Angela Pistoia), SIAM J. Math. Anal. 55 (2023), no. 5, 4816-4842 (<http://www.arxiv.org/abs/2211.12106>).
- [21] *Prescribing Gaussian curvature on surfaces with conical singularity and geodesic boundary* (with Aleks Jevnikar, Zhi-An Wang and Wen Yang), Ann. Mat. Pura Appl. (4) 202 (2023), no. 3, 1173-1185 (<http://www.arxiv.org/abs/2011.01505>).
- [20] *A blow-up phenomenon for a non-local Liouville-type equation* (with María Medina and Angela Pistoia), J. Anal. Math. 149 (2023), no. 1, 343-367. (<http://www.arxiv.org/abs/2011.01883>).
- [19] *Large conformal metrics with prescribed Gaussian and geodesic curvatures* (with María Medina and Angela Pistoia), Calc. Var. Partial Differential Equations 60 (2021), no. 1, 39 (<http://www.arxiv.org/abs/2006.12900>).
- [18] *Asymptotic behavior of minimal solutions to $-\Delta u = \lambda f(u)$ as $\lambda \rightarrow -\infty$* (with Francesca Gladiali e Massimo Grossi), Discrete Contin. Dyn. Syst. 41 (2021), no.2, 681-700 (<http://www.arxiv.org/abs/1911.03152>).
- [17] *A double mean field equation related to a curvature prescription problem* (with Rafael López Soriano), J. Diff. Equations 269 (2020), no. 4, 2705-2740 (<http://www.arxiv.org/abs/1906.10934>).

- [16] *Non-uniqueness of blowing-up solutions to the Gelfand problem* (with Massimo Grossi e Angela Pistoia), Calc. Var. Partial Differential Equations (2019), no. 5, Paper No. 163, 28 pp. (<http://www.arxiv.org/abs/1902.03484>).
- [15] *Uniform bounds for solutions to elliptic problems on simply connected planar domains*, Proc. Amer. Math. Soc. 147 (2019), no. 10, 4289-4299 (<http://www.arxiv.org/abs/1809.05684>).
- [14] *A general existence result for stationary solutions to the Keller-Segel system*, Discrete Contin. Dyn. Syst. 39 (2019), no. 2, 905-926, (<http://www.arxiv.org/abs/1802.02551>).
- [13] *A unified approach of blow-up phenomena for two-dimensional singular Liouville systems* (with Angela Pistoia), Rev. Mat. Iberoam. 34 (2018), no. 4, 1867-1910 (<http://www.arxiv.org/abs/1607.00427>).
- [12] *Groundstates of the Choquard equations with a sign-changing self-interaction potential* (with Jean Van Schaftingen), Z. Angew. Math. Phys. 69 (2018), no. 3, 69:86 (<http://www.arxiv.org/abs/1710.04406>).
- [11] *Nonradial entire solutions for Liouville systems* (with Francesca Gladiali e Massimo Grossi), J. Diff. Equations 263 (2017), no. 8, 5151-5174 (<http://www.arxiv.org/abs/1701.02948>).
- [10] *Existence of groundstates for a class of nonlinear Choquard equations in the plane* (with Jean Van Schaftingen), Adv. Nonlinear Stud. 17 (2017), no. 3, 581-594 (<http://www.arxiv.org/abs/1604.03294>).
- [9] *B_2 and G_2 Toda systems on compact surfaces: a variational approach*, J. Math. Phys. 58 (2017), no. 1, 011506, 25 pp. (<http://www.arxiv.org/abs/1512.07566>).
- [8] *Ground states solutions for a nonlinear Choquard equation*, Rend. Sem. Mat. Univ. Politec. Torino, Vol. 74, 2 (2016), 53-60 (<http://www.arxiv.org/abs/1701.02376>).
- [7] *Existence and non-existence results for the $SU(3)$ singular Toda system on compact surfaces* (with Andrea Malchiodi), J. Funct. Anal. 270 (2016), no. 10, 3750-3807 (<http://www.arxiv.org/abs/1508.00929>).
- [6] *Moser-Trudinger inequalities for singular Liouville systems*, Math. Z. 282 (2016), no. 3-4, 1169-1190 (<http://www.arxiv.org/abs/1410.4994>).
- [5] *A general existence result for the Toda system on compact surfaces* (with Aleks Jevnikar, Andrea Malchiodi e David Ruiz), Adv. Math. 285 (2015), 937-979 (<http://www.arxiv.org/abs/1306.5404>).
- [4] *A note on compactness properties of the singular Toda system* (with Gabriele Mancini), Atti Accad. Naz. Lincei Rend. Lincei Mat. Appl. 26(3):299-307, 2015 (<http://www.arxiv.org/abs/1410.4991>).
- [3] *Existence and multiplicity result for the singular Toda system*, J. Math. Anal. Appl. 424 (2015), no. 1, 49-85 (<http://www.arxiv.org/abs/1404.1970>).
- [2] *A Moser-Trudinger inequality for the singular Toda system* (with Andrea Malchiodi), Bull. Inst. Math. Acad. Sin. (N.S.) 9 (2014), no. 1, 1-23 (<http://www.arxiv.org/abs/1307.3921>).
- [1] *Remarks on the Moser-Trudinger inequality* (with Gabriele Mancini), Adv. Nonlinear Anal. 2 (2013), no. 4, 389-425 (<http://www.arxiv.org/abs/1307.0746>).

Visits at universities and research centers

- 09/2024 University of Granada, invited by Prof. Rafael López Soriano.
- 03/2024 Autonomous University of Madrid, invited by Prof. María del Mar González.
- 06 - 07/2023 University of Granada, invited by Prof. Rafael López Soriano.
- 05 - 06/2023 University of Bari, invited by Prof. Gabriele Mancini.

- 04/2022 Authonomous University of Madrid, invited by Prof. María Medina.
 04/2022 University Carlos III of Madrid, invited by Prof. Rafael López Soriano.
 10/2018 Mathematisches Forschungsinstitut Oberwolfach (Germany), invited by Prof. Rafael López Soriano.
 12/2017 Scuola Normale Superiore, Pisa, invited by Prof. Andrea Malchiodi.
 11/2016
 11/2015
 07/2015
 02/2015
 07 - 08/2017 University of Basel, invited by Prof. Luca Martinazzi.
 03 - 04/2017
 03 - 04/2015 University of British Columbia, Vancouver, invited by Prof. Jun-Cheng Wei.
 10 - 11/2013 University of Warwick, invited by Prof. Andrea Malchiodi.
 07/2013
 04 - 05/2013

Invited seminars

- 02/2025 *Té di Matematica*, Roma Tre University.
 09/2024 University of Granada.
 03/2024 Authonomous University of Madrid.
 11/2023 *Mathematical analysis seminar*, Sapienza University of Rome.
 06/2023 University of Bari.
 10/2022 *Nonlinear differential problems*, Sapienza University of Rome.
 04/2022 *Q-Math Seminar*, University Carlos III of Madrid.
 04/2022 *Jornada de EDPs*, Authonomous University of Madrid.
 04/2022 *Differential equations seminars*, University of Rome Tor Vergata.
 04/2019 *Mathematical Analysis meetings at SBAI department*, Sapienza University of Rome.
 12/2017 Scuola Normale Superiore, Pisa.
 03/2017 *Analysis and PDEs Seminar*, Swansea University.
 02/2017 *Nonlinear differential problems*, Sapienza University of Rome.
 02/2017 *Differential equations seminars*, University of Rome Tor Vergata.
 11/2016 University of Basel.
 11/2016 Scuola Normale Superiore, Pisa.
 05/2016 *Séminaire Analyse non linéaire et EDP*, Université libre de Bruxelles.
 12/2015 Université Catholique de Louvain.
 11/2015 Scuola Normale Superiore, Pisa.
 04/2015 *Nonlinear differential problems*, Sapienza University of Rome.
 04/2015 *Differential equations seminars*, University of Rome Tor Vergata.
 04/2015 *Analysis Junior Seminar*, S.I.S.S.A., Trieste.
 04/2014 *Analysis Junior Seminar*, S.I.S.S.A., Trieste.
 11/2013 *Analysis Seminar*, University of Warwick.

Talks at conferences

- 12/2024 *The 14th AIMS Conference*, New York University Abu Dhabi (2 talks).
 04/2024 *Highlights in Nonlinear PDEs*, Gaeta (Italy).
 10/2023 *Chiacchierate nonlineari*, University of Sassari, Alghero (Italy).
 06/2023 *International doctoral summer school in conformal geometry and non-local operators*, University of Granada.
 01/2023 *PDEs in Cogne: a friendly meeting in the snow*, Cogne (Italy).

- 06/2022 *Geometric Analysis and PDE on Garda Lake*, University of Milan, Gargnano (Italy).
- 05/2022 *INdAM day*, Roma Tre University.
- 11/2021 *Tutti insieme... nonlinearmente*, Manfredonia (Italy).
- 09/2021 *Three days of PDEs, friendship, love and nonlinearities*, University of Pisa.
- 05/2021 *Variational and PDE problems in Geometric Analysis, III*, (online).
- 01/2020 *Congreso de Jóvenes Investigadores de la RSME*, Jaume I University, Castellón de la Plana (Spain).
- 06/2019 *Intensive Week of PDEs @ Cogne*, Cogne (Italy).
- 05/2019 *International Conference on Elliptic and Parabolic Problems*, Gaeta (Italy).
- 05/2019 *Nonlinear Geometric PDE's*, Banff International Research Station (Canada).
- 09/2018 *Nonlinear Analysis and PDEs in Caserta*, University of Campania Luigi Vanvitelli, Caserta.
- 07/2018 *The 12th AIMS Conference on Dynamical Systems, Differential Equations and Applications*, National Taiwan University, Taipei.
- 05/2018 *Brescia-Trento Nonlinear Day*, Catholic University of the Sacred Heart, Brescia.
- 04/2018 *Physical, Geometrical and Analytical Aspects of Mean Fields Systems of Liouville type*, Banff International Research Station (Canada).
- 02/2018 *Variational Methods in Analysis, Geometry and Physics*, Scuola Normale Superiore, Pisa.
- 11/2017 *First Belgium-Chile-Italy Conference in PDEs*, Université Libre de Bruxelles.
- 06/2017 *Emerging issues in nonlinear elliptic equations*, Mathematical Research and Conference Center, Bedlewo (Poland).
- 05/2017 *A.MA.CA.*, Sapienza University of Rome.
- 06 - 07/2016 *2016 EWM-EMS Summer School*, Mittag-Leffler Institute, Djursholm (Sweden).
- 05/2016 *Bru-To PDE's*, University of Turin.
- 09/2015 *XX Conference of Italian Mathematical Union*, University of Siena.
- 12/2014 *Two-day meeting in honor of Antonio Ambrosetti*, Istituto Canossiano Le Romite, Venice.

Participation in schools and conferences

- 02/2025 *Recent progress in PDEs*, Sapienza University of Rome.
- 01/2025 *Regularity and geometric aspects of nonlinear PDEs*, Polytechnic University of Milan.
- 01/2025 *Calculus of Variations and PDEs in Geometric Analysis*, Sapienza University of Rome.
- 11/2024 *Curvature and Geometric Analysis in Rome*, Sapienza University of Rome.
- 06/2024 *A Glimpse into PDEs*, University of Campania Luigi Vanvitelli, Caserta.
- 06/2024 *PDEs at Grand Paradis, IV edition*, Cogne (Italy).
- 02/2024 *ONE 2024 - a One-day meeting in Nonlinear differential Equations*, University of Bari.
- 01/2024 *New Trends in Nonlinear PDE's, Physics and Geometry*, University of Granada.
- 05/2023 *Nonlinear PDEs in Cosenza*, University of Calabria, Cosenza.
- 09/2022 *Partial Differential Equations and related Functional Inequalities*, Accademia dei Lincei, Rome.
- 09/2022 *Qualitative and quantitative aspects of nonlinear PDEs*, University and Polytechnic University of Bari.
- 06/2022 *Spherical surfaces and related topics*, Scuola Normale Superiore, Cortona (Italy).
- 02/2022 *PDEs in presence in Rome 2022*, Sapienza University of Rome.
- 09/2021 *Geometric PDEs @ Caserta*, University of Campania Luigi Vanvitelli, Caserta.

- 06/2020 *Intensive Week on PDEs on the WEB*, (online).
- 11 - 12/2019 *Variational methods, with applications to problems in mathematical physics and geometry*, Istituto Canossiano Le Romite, Venice
- 07/2019 *XI Workshop in Nonlinear Differential Equations*, Riemann International School of Mathematics, Varese.
- 01/2019 *Geometry and PDE in front of the Alhambra*, University of Granada (Spain).
- 06/2018 *Nonlinear PDEs in Geometry and Physics*, Scuola Normale Superiore, Cortona (Italy).
- 05/2018 *A.MA.CA.*, Sapienza University of Rome.
- 02/2018 *Young PDE's @ Roma*, Sapienza University of Rome.
- 01/2018 *2nd Italian-Chilean Workshop in PDE's*, Istituto Nazionale di Alta Matematica (INdAM), Rome.
- 10/2017 *Analysis and Dynamics*, Marina di San Gregorio (Italy).
- 06/2017 *Nonlinear Analysis in Rome*, University of Notre Dame, Rome.
- 01/2017 *Roma Caput PDE*, Sapienza University of Rome.
- 12/2015 *Nonlinear Function Spaces and Mathematical Sciences*, University of Lyon 1.
- 06/2015 *Unplugged in PDEs*, Sapienza University of Rome.
- 06/2015 *Espalia 2015*, Sapienza University of Rome.
- 01/2015 *Complex patterns in Nonlinear Phenomena*, University of Turin.
- 06/2014 *Thematic Program on Nonlinear PDEs in Geometry and Physics*, University of Notre Dame (United States).
- 03/2014 *Spring School on Nonlinear PDEs*, Sapienza University of Rome.
- 01/2014 *Variational Methods in Elliptic Equations and Systems*, University of Lisbon.
- 10/2013 *PDE days in Roma*, Sapienza University of Rome.
- 09/2013 *P(n) School on recent Trends in Nonlinear PDEs*, Sapienza University of Rome.
- 11/2012 *Geometric PDEs*, Institut Henri Poincaré, Paris.
- 10/2012 *Topics in Calculus of Variations and Applications*, University of Parma.
- 06/2012 *ICTP-ESF Conference and School on Geometric Analysis*, I.C.T.P., Trieste.

Coordination of research projects

- 2023 - 24 INdAM-GNAMPA research project “Proprietà qualitative delle soluzioni di equazioni ellittiche”, Funding: 3500 Euros.

Participation in research projects

- 2024 - 25 INdAM-GNAMPA research project “Fenomeni non lineari: problemi locali e non locali e loro applicazioni”, Coordinator: Prof.ssa Giusi Vaira.
- 2024 - 25 INdAM-GNAMPA research project “Problemi di doppia curvatura su varietà a bordo e legami con le EDP di tipo ellittico”, Coordinator: Prof. Marco Ghimenti.
- 2023 - 25 PRIN “Variational and Analytical aspects of Geometric PDEs”, Coordinator: Prof. Andrea Malchiodi.
- 2022 - 23 INdAM-GNAMPA research project “Fenomeni di blow-up per equazioni non lineari”, Coordinator: Prof. Gabriele Mancini.
- 2020 - 21 INdAM-GNAMPA research project “Aspetti variazionali di alcune PDE in geometria conforme”, Coordinator: Prof. William Borrelli.
- 2017 SNF research project PP00P2-144669, Coordinator: Prof. Luca Martinazzi.
- 2016 - 18 PRIN “Variational methods, with applications to problems in mathematical physics and geometry”, Coordinator: Prof. Andrea Malchiodi.
- 2015 - 16 Projet de recherche FNRS T.1100.14 “Existence and asymptotic behavior of solutions to systems of semilinear elliptic partial differential equations”, Coordinator: Prof. Denis Bonheure.

- 2013 - 15 PRIN “Variational and perturbative aspects of nonlinear differential problems”,
Coordinator: Prof. Andrea Malchiodi.
- 2011 - 13 FIRB “Analysis and beyond”, Coordinator: Prof. Andrea Malchiodi.

Reviewing activity

Referee for the following journals:

Acta Appl. Math.;
Annali di Matematica Pura e Applicata (2);
Bull. Iranian Math. Soc.;
Bull. Malays. Math. Sci. Soc. (2);
Calc. Var. Partial Differential Equations (4);
Comm. Anal. Geom.;
Commun. Pure Appl. Anal. (2);
Discrete Contin. Dyn. Syst. (4);
Int. Math. Res. Not.;
Israel J. Math.;
J. Anal. Math.;
J. Diff. Equations;
J. Differential Geom. (3);
J. Fixed Point Theory Appl.;
J. Lond. Math. Soc.;
J. Math. Anal. Appl. (5);
J. Math. Phys.;
Math. Methods Appl. Sci.;
NODEA Nonlinear Differential Equations Appl. (4);
Nonlinear Anal. (2);
Nonlinearity;
Pacific J. Math.;
Proc. Roy. Soc. Edinburgh Sect. A (3);
SIAM J. Math. Anal. (3);
Topol. Methods Nonlinear Anal. (2);
Z. Angew. Math. Phys. (5).

- 09 - 11/2021 Reviewer for VQR - ANVUR (Evaluation of research for Italian universities) (9 papers).
- 12/2014 - Reviewer for MathSciNet database (39 papers and 1 book).

Organizations of events

- 09/2023 Conference *Three days of nonlinear PDEs*, Terme di Sorano (Italy).
- 11/2020 - 05/2021 Organization of the online seminars *PDE's: Italia vs España*.

Participation in Ph.D. final examination committees

- 05/2022 Sabina Angeloni, Roma Tre University (Supervisor: Prof. Pierpaolo Esposito).

Supervision of Ph.D. students and postdoc

- 04-06/2024 Francisco Javier Reyes, Ph.D. student in visit from University of Granada (Supervisor: Prof. David Ruiz).

Supervision of theses

- 10/2024 Piero Mangia, Master's Degree in Mathematics, University of Roma Tre;

Thesis title: “A variational approach to scalar field equations and Choquard-type equations”;

Final mark: 110/110 *cum laude*.

10/2022 Manolo Bartocci, Master’s Degree in Mathematics, University of Roma Tre;

Thesis title: “On Moser-Adams’ sharp inequalities about exponential integrability for higher order weak and fractional derivatives”;

Final mark: 110/110 *cum laude*.

Teaching activity

- 03 - 05/2025 Regular teacher (joint with Pierpaolo Esposito) for the course “Geometric Analysis”, Master’s degree courses in Mathematics and Physics, Roma Tre University.
- 09 - 12/2024 Teaching assistance for the course “Calculus III”, Bachelor’s degree courses in Mathematics and Physics, Roma Tre University.
- 10 - 12/2023 Teaching assistance for the course “Calculus I”, Bachelor’s degree courses in Mathematics and Physics, Roma Tre University.
- 10 - 12/2024
- 09 - 11/2023 Regular teacher for the course “Partial Differential Equations”, Master’s degree course in Mathematics, Roma Tre University.
- 09/2021 - 01/2022 Regular teacher for the course “Calculus I”, Bachelor’s degree course in Electronical Engineering, Roma Tre University.
- 09/2022 - 01/2023
- 09 - 12/2021 Regular teacher for the course “Advanced analysis”, Master’s degree course in Mathematics, Roma Tre University.
- 09 - 12/2022
- 09 - 12/2023
- 09 - 12/2024
- 10/2020 - 01/2021 Regular teacher for the course “Calculus I” (channel L-Z), Bachelor’s degree course in Sea Technologies Engineering, Roma Tre University.
- 10/2019 - 01/2020 Exercises for the course “Calculus I”, Bachelor’s degree course in Sea Technologies Engineering, Roma Tre University.
- 02 - 05/2019 Regular teacher for the course “Functional Analysis”, Master’s degree course in Mathematics, Roma Tre University.
- 02 - 06/2020
- 02 - 06/2021
- 09 - 12/2018 Teaching assistance for the course “Advanced analysis”, Master’s degree course in Mathematics, Roma Tre University.
- 09 - 12/2017
- 02 - 05/2018 Teaching assistance for the course “Calculus 2”, Bachelor’s degree course in Mathematics, Roma Tre University.
- 10 - 12/2017 Teaching collaboration for the course “Calculus I”, Bachelor’s degree course in Clinical Engineering, Sapienza University of Rome.
- 09 - 12/2016 Tutoring for the course “Calculus I”, Degree course in Clinical Engineering, Sapienza University of Rome.
- 09 - 12/2016 Teaching collaboration for the course “Calculus I”, Bachelor’s degree course in Electrotechnical Engineering, Sapienza University of Rome.
- 02 - 05/2011 Teaching support for the course “Differential and integral multi-variable calculus”, Bachelor’s degree course in Mathematics, Roma Tre University.
- 02 - 05/2010
- 09 - 12/2010 Teaching support for the course “Single-variable and multivariable calculus”, Bachelor’s degree course in Mathematics, Roma Tre University.
- 09 - 12/2009
- 09 - 12/2008
- 01 - 09/2010 Teaching support for the course “Preparation for the final examination”, Bachelor’s degree course in Mathematics, Roma Tre University.
- 02 - 05/2009 Teaching support for the course “Differential equations and mechanics”, Bachelor’s degree course in Mathematics, Roma Tre University.
- 02 - 05/2008 Teaching support for the course “Linear algebra”, Bachelor’s degree course in Mathematics, Roma Tre University.

Academic honors

- 11/2023 National habilitation to full professor in Mathematical Analysis and Probability.
- 07/2018 National habilitation to associate professor in Mathematical Analysis and Probability.
- 10/2011 Four-year fellowship by the International School for Advances Studies (S.I.S.S.A., Trieste), confirmed for the three following years on a merit base.
- 03/2010 Fellowship by the Istituto Nazionale di Alta Matematica (INdAM) for first-year students in Master Courses in Mathematics.
- 09/2006 Three-year fellowship by the Roma Tre University for first-year students in the Bachelor Course in Mathematics, confirmed for the two following years on a merit base.
- 03/2006 Winner of mathematics contest for free enrollment in Roma Tre University for the Academic Year 2006/07.

Language skills

- Italian language Native.
- English language Advanced knowledge and understanding of both written and spoken language.
- Spanish language Intermediate knowledge and understanding of both written and spoken language.
- French language Basic knowledge and understanding of both written and spoken language.

References

Prof. Andrea Malchiodi;
Scuola Normale Superiore, Pisa;
email: andrea.malchiodi@sns.it.

Prof. Jean Van Schaftingen;
Université Catholique de Louvain;
email: jean.vanschaftingen@uclouvain.be.

Prof. Massimo Grossi;
Sapienza University of Rome;
email: massimo.grossi@uniroma1.it.

Prof. Angela Pistoia;
Sapienza University of Rome;
email: angela.pistoia@uniroma1.it.

Prof. Pierpaolo Esposito;
Roma Tre University;
email: pierpaolo.esposito@uniroma3.it.

Prof. David Ruiz Aguilar;
University of Granada;
email: daruiz@ugr.es.