

DATI PERSONALI

Nome: **Giandomenico ORLANDI** Luogo e data di nascita: Roma, 05/01/1969
Nazionalità: Italiana, Francese
Lingue conosciute: francese, tedesco, spagnolo, portoghese, inglese, parlato e scritto.

POSIZIONE ATTUALE

Prof. I fascia MAT/05 - Analisi Matematica, Dipartimento di Informatica, Univ. Verona,
dal 1/1/2012.

FORMAZIONE ACCADEMICA

Laurea in Matematica, Università di Trento, 18/7/1991
Dottorato in Matematica, Università di Trento, 24/1/1997

PRECEDENTI ATTIVITÀ SCIENTIFICO-PROFESSIONALI

1/1/2005–31/12/2011 Prof. II fascia, s.s.d. MAT/05 Analisi Matematica, Facoltà di Scienze M.F.N., Univ. Verona.

1/4/1997–31/12/2004 Ricercatore di Analisi Matematica, Facoltà di Scienze M.F.N., Università di Verona

POSIZIONI DI PROFESSORE VISITATORE

Centro: Department of Mathematics, University of Toronto

Durata: 19/6/2018-24/07/2018

Posizione: Visiting Professor

Centro: Centre de Mathématiques Appliquées, Ecole Polytechnique

Durata: 23/6/2012–31/8/2012

Posizione: Professeur Invité

Centro: Laboratoire d'Analyse et de Mathématiques Appliquées, Université Paris Est

Durata: 9/2/2011–9/5/2011

Posizione: Professeur Invité

Centro: Laboratoire J.L. Lions, Université Paris VI

Durata: 20/3/2008–19/4/2008

Posizione: Professeur Invité

Centro: Department of Mathematics, University of Toronto

Durata: 19/4/2007 – 4/5/2007

Posizione: Visiting Professor

Centro: Laboratoire J. Dieudonné, Université de Nice

Durata: 12/2/2006 – 13/3/2006

Posizione: Professeur Invité

Centro: Laboratoire J.L.Lions, Université Paris VI, France.

Durata: 1/3/2003 – 30/4/2003 e 20/11/2003 – 19/12/2003

Posizione: Visiting Post-Doc, prog. europeo RTN “*Fronts-Singularities*”

Centro: Laboratoire d'Analyse Numérique, Université Paris VI, France.
Durata: 15/11/2000 – 15/12/2000
Posizione: Visiting Post-Doc, progetto comune C.N.R./C.N.R.S. n. 132.03.2
Centro: Laboratoire d'Analyse Numérique, Université Paris VI, France.
Durata: 1/3/2000 – 31/8/2000
Posizione: borsista Post-Doc C.N.R., bando n. 203.01.71
Centro: C.M.L.A., Ecole Normale Supérieure de Cachan, France
Durata: 1/3/1999 – 31/8/1999
Posizione: borsista Post-Doc C.N.R. , bando n. 203.01.69

DIREZIONE DI PROGETTI DI RICERCA FINANZIATI

Titolo: *MATHS DISC, MATHematical modelling Simulation and Data science for Industrial and Societal Challenges*, Erasmus Mundus Joint Master EU-ERASMUS-EDU-2024-PEX-EMJM-MOB, duration: 10/2024-09/2030.
 Composizione MATHS DISC Consortium: Università di Verona (coordinatore), Bergische Universität Wuppertal, Université Grenoble Alpes, Instituto Superior Técnico Universidade de Lisboa, Igor Sikorskii Kyiv Polytechnic Institute.
Ruolo: Coordinatore Principale
Titolo: *NFROGS, Nonlinear partial differential equations describing FRont propagation, Geometric variational problems and Singularities*, EU-HE-MSCA-IF-2023
 Durata : 09/2024-09/2026. Post-Doc: Ramón Oliver-Bonafoux.
Ruolo: Coordinatore Principale
Titolo: *Molecularly imprinted silk fibroin nano-traps* MUR-PRIN 2022, durata: 09/2023-09/2025, PI A.M. Bossi (Verona)
Titolo: *Optimization of networks from the point of view of Geometry and Analysis* GNAMPA-INDAM 2022, durata: 03/2022-03/2023, co-PI M. Bonafini (Verona)
Ruolo: co-PI
Titolo: *Geometric evolution of multi-agent systems*, UNIVR - RIBA 2019, durata: 2021-2022, PI M. Caliri (Verona)
Titolo: *CuMin, Currents and Minimizing Networks*, EU-H2020-MSCA-IF-2016, durata : 09/2017-09/2019. Ricercatrice: Annalisa Massaccesi
Ruolo: Coordinatore del progetto
Titolo: *Geometric evolutions of curves, surfaces and networks*, GNAMPA-INDAM 2017, durata: 03/2017-03/2018
Ruolo: Coordinatore nazionale
Titolo: *Some mathematical models in image processing and interfaces motion*, prog. Azione integrata Italia-Spagna - MIUR, durata: 2009-2011
Ruolo: Coordinatore principale.
Ruolo: coordinatore unità di Verona
Titolo: *Energie di interfaccia e problemi parabolici-iperbolici in ambiente discreto e continuo*, prog. GNAMPA-INDAM 2008

Ruolo: Coordinatore nazionale

ORGANIZZAZIONE DI EVENTI

Conferenza: 23rd ECMI Conference on Industrial and Applied Mathematics, Kaunas (LT), 23/6-3/7/2026. <https://ecmi2026.org>

School: “Variational and PDE methods in nonlinear Science”, CIME Courses 2023, Cetraro (Italy) 10-14/07/2023, (with B. Stroffolini, F. Bethuel) <https://sites.google.com/unifi.it/cime/c-i-m-e-courses/c-i-m-e-courses-2023/variational-and-pde-methods-in-nonlinear-science?authuser=0>

School: “XXXV ECMI Modelling Week”, Verona 2-9/7/2022, (with G. Albi, L. Di Persio, N. Sansonetto) <https://ecmimw2022.di.univr.it>

Minisymposium: “Variational and evolution problems for curves and networks”, DEA 2019 AGH, Krakow, 16-20/09/2019, <https://www.dea.agh.edu.pl/d2-schedule>

Workshop: “From interacting particle systems to kinetic equations”, University of Verona, 26-30/11/2018 (con G. Albi, M. Calziari, A. Marigonda)

Workshop: “Geometric Measure Theory in Verona”, University of Verona, 11-15/06/2018 (con A. Massaccesi, G. De Philippis, D. Vittone), <https://gmtarena.wordpress.com>

Workshop: “Curves and networks in Geometric Analysis”, Centro di Ricerca Matematica E. De Giorgi, Pisa, 26-30/6/2017 (con C. Mantegazza, M. Novaga) <http://www.crm.sns.it>

Minisymposium: “Geometric variational and evolution problems”, First Joint Meeting Brazil - Italy in Mathematics, Rio de Janeiro, 29/8-2/9/2016 (con S. Nardulli) <http://www.sbm.org.br/jointmeeting-italy/special-sessions>

Workshop: “Autumn School in mathematical imaging and statistical learning”, Dipartimento di Informatica, Verona, 6/10–24/10/2014 (con S. Parisotto) <http://profs.scienze.univr.it/sip14>

Workshop: “Autumn School in variational methods for image processing”, Dipartimento di Informatica, Verona, 21/10–31/10/2013 (con U. Castellani) <http://profs.scienze.univr.it/sip14/sip13>

Workshop: “Geometric evolutions and minimal surfaces in Lorentzian manifolds”, Centro di Ricerca Matematica E. De Giorgi, Pisa, 6/9–10/9/2010 (con G. Bellettini, C. Mantegazza, M. Novaga) <http://www.crm.sns.it>

Workshop: “Singularities in nonlinear evolution phenomena and applications”, Satellite Conference of the 5th European Congress of Mathematics, Centro di Ricerca Matematica E. De Giorgi, Pisa, 26/5–30/5/2008 (con S. Baldo e M. Novaga) <http://www.crm.sns.it>

Workshop: “Mathematical Problems in Modeling Generation and Dynamics of Vortices”, Verona, 12-13/3/2004 (con L. Morato, P. Siri) <http://profs.sci.univr.it/siri/vortices.html>

Workshop: “Topics in image analysis”, Verona, 17/3/1998 (con B. Forte)

RESPONSABILITA' SCIENTIFICA DI POST-DOC

Titolo: *Proprietà geometriche e globali di EDP e problemi variazionali suggeriti dalla Fisica*

Centro: Dipartimento di Informatica, Univ. Verona

Durata: 1/4/08–31/3/09

Assegnista: S. Weitkamp

Titolo: *Variational and geometric measure theory methods for phase transition-type gradient systems suggested by Physics, Biology and Material Sciences*

Centro: Dipartimento di Informatica, Univ. Verona

Durata: 15/12/22–14/12/24 **Assegnista:** R. Oliver-Bonafoux

SUPERVISIONE TESI DI DOTTORATO

PhD Thesis: “Variational methods for hyperbolic obstacle-type problems, k-harmonic maps with defects and optimal Steiner-type networks”

Candidate: Le Van Phu Cuong (2022)

PhD Thesis: “Variational approximations of optimal networks and hyperbolic obstacle problems”

Candidato: M. Bonafini (2019)

posizione attuale: Post-Doc, TUM München

CONFERENZE SU INVITO

“Asymptotics for Ginzburg-Landau equations on complex line bundles over compact Riemannian manifolds”, conference “Topics in Geometric Measure Theory”, Pisa, 30/6-4/7/2025

“A variational approach to hyperbolic obstacle problems”, workshop “Nonlinear Analysis and PDE in Lille”, INRIA, Lille, 1-3/2/23

“Topological singular set for vector valued maps and applications”, workshop “Variational methods and applications”, CRM Centro di Ricerca Matematica E. De Giorgi, Pisa 6-10/09/21

“Energy minimizing maps into Finsler manifolds and optimal 1D networks”, DEA 2019, AGH Krakow, 17/09/2019

“Topological singular set of vector-valued maps and applications”, Conference “Variational Problems in Physics”, Toulouse, 22 May 2019

“Singularities for vector-valued Sobolev maps”, workshop “Geometric Measure Theory and Applications”, Canazei 25-29/6/2019

“Convex relaxation and variational approximation of functionals defined on 1-dimensional connected sets”, Workshop “Phase transitions”, Banff International Research Station, Banff, 30/04-05/05/2017

“On the convex relaxation and variational approximation of functionals defined on 1-dimensional connected sets, Workshop “Transport Problems in Zürich, Universität Zürich, 24-26/4/2017

“Weighted TV minimization and application to vortex density models”, First Joint Meeting Brazil - Italy in Mathematics, Rio de Janeiro, 2/9/2016

“Convex relaxation and variational approximation for the Euclidean Steiner Tree problem”, Workshop “Vortices and related topics in fluid and quantum mechanics”, ANR SchEq, Alghero 18/07/16

“Timelike minimal surfaces: weak parametrizations, varifolds and approximation schemes”, Seminario di Analisi, Dip. Matematica e Applicazioni, Napoli 14/12/15

“Timelike minimal surfaces in Minkowski space and varifolds”, Workshop “Varifold Day”, Modena 11/03/15

“Vorticity models in Condensed Matter Physics and gradient flows of 1-homogeneous functionals” SIAM Conference - Nonlinear Waves NW14 - Cambridge 13/08/14

“Modèles asymptotiques en Physique de la matière condensée et flots gradients de fonctionnelles 1-homogènes”, séminaire Institut Camille Jordan et Ecole Normale Supérieure de Lyon, Lyon, 1/4/14.

“Time-like minimal surfaces in Minkowski space”, Conference “The 38th Sapporo Symposium on Partial Differential Equations”, Sapporo 23/08/13

“On time-like extremal surfaces in Minkowski spacetime”, School and Workshop “Geometric Measure Theory and Optimal Transport”, ICTP Trieste, 30/07/13.

“Timelike minimal surfaces in Minkowski spacetime”, workshop “Solitons, Vortices, Minimal surfaces and their Dynamics”, Institut Mittag-Leffler, Djursholm, 17/07/13

“Limiting models in condensed matter Physics and gradient flows of one-homogeneous functionals”, workshop “Geometric PDE”, Centro di Ricerca Matematica E. De Giorgi, Pisa 14/9/12.

“Varifold solutions to the relativistic strings equation”, workshop “PDE’s in real and complex spaces”, Padova 16/2/12.

“Slow motion for gradient systems with equal depth multiple-well potential”, minisymposium “Concentration phenomena in variational problems of mathematical physics”, ICIAM 2011, Vancouver 20/7/11.

“Surfaces minimales de type temps et limites singulières d’EDP hyperboliques”, Séminaire *Problèmes Spectraux en Physique Mathématique*, Institut Henri Poincaré, Paris 7/3/11.

“Asymptotic analysis of Ginzburg-Landau models”, Seminario del Dip. Informatica Univ. Verona, 23/11/10.

“Vortex density models for 3-D superconductivity”, Congresso SIMAI 2010, Cagliari, 25/6/2010.

“ Γ -convergence for Ginzburg-Landau models in 3-d superconductivity”, *SIAM conference PD09*, Miami 9/12/09.

“Gamma-convergenza dei funzionali di Ginzburg-Landau in 3d per superconduttori con campo magnetico critico”, Seminario del Dip. Mat. Univ. di Padova, 26/3/09.

“Dynamics of multiple degree Ginzburg-Landau vortices”, Analysis Seminar, Courant Institute for Mathematical Sciences, New York 8/5/08.

“ Γ -convergence des fonctionnelles de Ginzburg-Landau pour la supraconductivité en 3-d”, Séminaire du Laboratoire J.L.Lions, Paris 18/4/08.

“Aspects of vortex dynamics in Ginzburg-Landau models”, minisymposium “Recent trends in nonlinear parabolic PDE and their singular limits”, ICIAM 07, Zürich, 20/7/2007.

“Alcuni aspetti della dinamica dei vortici nei modelli 2d di Ginzburg-Landau”, seminario del Dip. Me.Mo.Mat., Univ. Roma 1, 18/4/2007.

“Dinámica de vortices de Ginzburg-Landau”, seminario del Depart. de Matemática Aplicada, Univ. Politécnica, Valencia, 14/3/2007.

“Asymptotics for the Ginzburg-Landau functional of superconductivity in high dimensions”, workshop *Limiting problems in Analysis*, Lorentz Center, Leiden (NL), 4/5/2006.

“Dynamique de vortex de degré multiple dans les modèles de Ginzburg-Landau”, seminario del Lab. Jean Dieudonné, Univ. Nice (F), 10/3/2006.

“Dinamica di vortici di grado multiplo nella teoria di Ginzburg-landau”, workshop “*Calcolo delle Variazioni: Teoria Geom. della Misura e Γ -convergenza*”, Levico, 9/2/2006.

“Movimiento de conjuntos de concentración en dinámica disipativa de Ginzburg-Landau”, seminario del Depart. de Matemática Aplicada, Univ. Complutense, Madrid, 29/3/2005.

“Dinamica dissipativa dei vortici in modelli 2D di Ginzburg-Landau”, workshop “*Calcolo delle Variazioni: Teoria Geom. della Misura e Γ -convergenza*”, Levico, 31/1/2005.

“Motion of concentration sets in Ginzburg-Landau equations”, congresso *SIAM Conference on Analysis of Partial Differential Equations*, Houston (TX), 7/12/2004.

“Collisions and phase-vortex interaction in dissipative Ginzburg-Landau dynamics”, congresso *Nonlinear partial differential equations describing front propagation and other singular phenomena*, Lorentz Center, Leiden (NL), 10/11/2004.

“Convergenza dell’equazione di Ginzburg-Landau parabolica al moto per curvatura media”, seminario del Dipartimento di Matematica, Univ. Roma 2, 3/6/2003.

“Anneaux de vorticit  dans Schr dinger non lin aire”, seminario presso il Laboratoire J.L. Lions, Univ. Paris VI, 12/3/2003.

“Jacobians and Ginzburg-Landau functionals”, congresso *Calculus of Variations in nonlinear phenomena*, Martina Franca (Italia), 26/9/2002.

“Ellipticity and compactness in the Ginzburg-Landau equation”, congresso *Variational problems with singularities*, Newton Institute, Cambridge 28/6/2001.

“Bords d’ensembles rectifiables et Jacobiens d’applications   valeur dans des spheres” seminario presso il Laboratoire d’Analyse Num rique, Univ. Paris VI, 23/5/2001.

“Applications ayant Jacobien prescrit et convergence variationnelle des energies de Ginz-

burg - Landau”, seminario presso il C.M.L.A., E. N. S. Cachan (F), 22/6/2000.

“Maps with prescribed Jacobians and variational convergence for Ginzburg - Landau energies”, congresso *Topological defects and Ginzburg-Landau functionals*, Lorentz Center, Leiden (NL), 4/4/2000.

“Problèmes variationnels à croissance linéaire en classes de cohomologie et theorie de Hodge non-linéaire”, seminario del C.M.L.A., E. N. S. Cachan (F), 14/5/99.

“On the approximation of homological cycles”. congresso *Analysis of the geometry of surfaces, maps and free boundaries*, Albert-Ludwigs Universität Freiburg (D), 13/7/98.

“Comportamento asintotico del funzionale di Ginzburg-Landau su fibrati lineari complessi”, workshop “*Calcolo delle Variazioni: Teoria Geometrica della Misura, rilassamento e Γ -convergenza*”, Trento (I) 23/2/95.

“Comportement asymptotique de la fonctionnelle de Ginzburg-Landau sur fibrés lineaires complexes”, seminario del Laboratoire d’Analyse Numerique, Univ. Paris VI, 16/2/95.

“Types de homotopie pour applications de Sobolev tendrement approchables entre variétés”, seminario del C.M.L.A., E. N. S. Cachan (F), 6/1/94.

PARTECIPAZIONE A COMMISSIONI DI ESAME FINALE DI DOTTORATO

Luogo e data: Université Pierre et Marie Curie Paris VI, 3/7/07

Candidato: S. Kirsch

Titolo: *Courbure moyenne et interfaces*

Luogo e data: Università di Trento, 29/2/08

Candidato: S. Weitzkamp

Titolo: *Some Problems with Singularities arising in Physics*

Luogo e data: Universitat Politècnica de Valencia, 28/4/08

Candidato: M.A. García March

Titolo: *Modelizaciòn y simulaciòn de dispositivos micromètricos basados en estructuras espaciales de solitones ópticos*

Luogo e data: Université Pierre et Marie Curie -Paris VI, 9/12/10

Candidato: N. Rougerie

Titolo: *La théorie de Gross-Pitaevskii pour un condensat de Bose-Einstein en rotation: vortex et transitions de phase*

Luogo e data: Université Pierre et Marie Curie -Paris VI, 12/12/11

Candidato: G. Nardi

Titolo: *On a characterization of the relaxation of a generalized Willmore functional*

Luogo e data: Scuola Normale Superiore - Pisa, 05/03/14

Candidato: A. Massaccesi

Titolo: *Currents with coefficients in groups, applications and other problems in Geometric Measure Theory*

Luogo e data: Institut Camille Jordan - Université Claude Bernard Lyon 1 - Lyon, 13/12/14

Candidato: B. Buet

Titolo: *Approximation de surfaces par des varifolds discrets: représentation, courbure, rectifiabilité*

Luogo e data: Université Pierre et Marie Curie - Paris VI, 23/1/15

candidata: D. Côte

Titolo: *Vortices and unbounded data for the parabolic Ginzburg - Landau equations*

Place and date: Sapienza Università di Roma - 19/2/19

candidate: F. Dipasquale

Title: *Variational methods in the Landau-De Gennes theory of liquid crystals*

Place and date: Università di Trento - 15/4/19

candidate: M. Bonafini

Title: *Variational approximations of optimal networks and hyeabolic obstacle problems*

Place and date: Università di Trento - 28/1/22

candidate: Le Van Phu Cuong

Title: *Variational methods for hyperbolic obstacle-type problems, k -harmonic maps with defects and optimal Steiner-type networks*

Place and date: Sorbonne Université Paris - 18/11/22

candidate: R. Oliver-Bonafoux

Title: *Some existence results for systems of phase transition type*

Place and date: Universidade de Sao Paulo - 21/07/23

candidate: R. Resende de Oliveira

Title: *Some regularity results in geometric measure theory*

PUBBLICAZIONI RECENTI

Articoli in rivista

[53] Corona, D.; Nardulli, S.; Oliver-Bonafoux, R.; Orlandi, G.; Piccione, P.; Multiplicity results for mass constrained Allen-Cahn equations on Riemannian manifolds with boundary. *Math. Ann.* 392 (2025), no. 3, 3479–3524.

[52] Dang, Thi Tam; Orlandi, G.; Existence and uniqueness for renormalized solutions to noncoercive nonlinear parabolic equations with unbounded convective term. *Rend. Sem. Mat. Univ. Padova* 153 (2025), 61–79.

[51] Canevari, G., Dipasquale, F.L., Orlandi, G., The Yang-Mills-Higgs Functional on Complex Line Bundles: Asymptotics for critical points. *Adv. Calc. Var.* (2024), published online, 43pp.

[50] Canevari, G., Dipasquale, F.L., Orlandi, G., The Yang-Mills-Higgs Functional on Complex Line Bundles: Γ -Convergence and the London Equation. *Arch. Rational Mech. Anal.* 247 (2023), no. 6, 104, 67pp.

[49] Baldo, S.; Le, V.P.C; Massaccesi, A.; Orlandi, G.; Energy minimizing maps with prescribed singularities and Gilbert-Steiner optimal networks, *Math. Eng.* 5 (2023), no.4, 078, 19pp.

- [48] Canevari, G; Orlandi, G; Topological singularities for vector-valued Sobolev maps and applications. *Ann. Fac. Sci. Toulouse Math.* (6) 30 (2021), no. 2, 327–351.
 - [47] Canevari, G; Orlandi, G; Topological singular set of vector-valued maps, II: Γ -convergence for Ginzburg-Landau type functionals. *Arch. Ration. Mech. Anal.* 241 (2021), no. 2, 1065–1135.
 - [46] Bonafini, M; Le, V.P.C; Novaga, M; Orlandi, G; On the obstacle problem for fractional semilinear wave equations. *Nonlinear Anal.* 210 (2021), 112368, 23 pp.
 - [45] Bonafini, M; Orlandi, G; Oudet, E; Variational approximation of functionals defined on 1-dimensional connected sets in R^n , *Adv. Calc. Var.* 14 (2021), n. 4, 541–553.
 - [44] Canevari, G; Orlandi, G; Vector-valued Sobolev maps and topological singularities. *Pure Appl. Funct. Anal.* 5 (2020), no. 4, 851 – 867.
 - [43] Calvo, J.; Marigonda, A.; Orlandi, G. Anisotropic tempered diffusion equations. *Nonlinear Anal.* 199 (2020), 111937, 27 pp.
 - [42] Canevari, G; Orlandi, G, Lifting for manifold-valued maps of bounded variation. *J. Funct. Anal.* 278 (2020), no. 10, 108453, 17 pp.
 - [41] Canevari, G; Orlandi, G, Improved partial regularity for manifold-constrained minimizers of subquadratic energies, *Comm. Math. Phys* (2020), *Comm. Math. Phys.* 374 (2020), no. 3, 1483–1495
 - [40] Canevari, G; Orlandi, G. Topological singular set of vector-valued maps, I: applications to manifold-constrained Sobolev and BV spaces. *Calc. Var. Partial Differential Equations* 58 (2019), no. 2, Art. 72, 40 pp.
- Key words:* Sobolev maps into manifolds, topological defects, flat chains
- [39] Bonafini, M.; Novaga, M.; Orlandi, G. A variational scheme for hyperbolic obstacle problems. *Nonlinear Anal.* 188 (2019), 389–404.
- Key words:* Hyperbolic equations, obstacle problem, convex approximation, minimizing movements
- [38] M. Bonafini, G. Orlandi, E. Oudet, Convex relaxation and variational approximation of functionals defined on 1-dimensional connected sets. *Atti Accad. Naz. Lincei Rend. Lincei Mat. Appl.* 29 (2018), no. 4, 597–606.
- Key words:* convex relaxation, Steiner tree problem, Gilbert-Steiner problem, Modica-Mortola
- [37] M. Bonafini, G. Orlandi, E. Oudet, Variational approximation of functionals defined on 1-dimensional connected sets: the planar case, *SIAM J. Math. Anal.* 50 (2018), no. 6, 6307–6332.
- Key words:* convex relaxation, Steiner tree problem, Gilbert-Steiner problem, Modica-Mortola

Curatele.

- [C2] *Variational and PDE methods in Nonlinear Science.* Lecture Notes in Mathematics, 2366, CIME Foundation Subseries, Springer, Cham, (2025).

ATTIVITA' ISTITUZIONALI

Prorettore alla strategia dell'Internazionalizzazione dell'Università di Verona (2025-presente) ■

membro della Commissione di Abilitazione Scientifica Nazionale, s.c. 01/A3 Analisi Matematica, Probabilità e Statistica Matematica, MUR (2021-2023)

Direttore Vicario, Dipartimento di Informatica (10/2019- 7/2024).

Presidente del Collegio Didattico di Matematica (2012-2018).

Membro dell' Educational Committee, ECMI - European Consortium for Mathematics in Industry (2015 - presente)

Membro del collegio docenti dottorato congiunto Univ. Trento-Verona in Matematica (2013/14-presente)

Supervisione di Tesi di Dottorato

PhD Thesis: "Variational methods for hyperbolic obstacle-type problems, k -harmonic maps with defects and optimal Steiner-type networks"

Candidato: Le Van Phu Cuong (2022)

PhD Thesis: "Variational approximations of optimal networks and hyperbolic obstacle problems"

Candidato: M. Bonafini (2019)

Supervisione di Tesi di Laurea Magistrale

Master Thesis: "A Topological Data Analysis approach to classification of archaeozoological bones"

candidate: Davide Adamo (2023)

actual position: PhD student, INRIA Sophia Antipolis

Master Thesis: "Methods for multi-scale propagation of branching networks arising in biology"

candidate: Sara Xhaysha (2022)

actual position: PhD student, Universität Wien

Master Thesis: "Discretization and implementation of differential equations modeling light-matter interactions"

co-supervisor: Brigitte Bidegaray (Université Grenoble Alpes)

candidate: Marta Ghirardelli (2022)

actual position: PhD student, NTNU Trondheim

Master Thesis: "Distributionally Robust Shape and Topology Optimization with Optimal Transport theory"

co-supervisor: B. Thibert (Université Grenoble Alpes)

candidate: Andrea Meda (2022)

actual position: PhD student, University of Edinburgh

Master Thesis: "Quantum algorithm for the sieve method"

candidate: Rina Ismailati (2021)

actual position: PhD student, New York University

Master Thesis: " Grey box model: combined semi-physical and neural network modeling applied to hydraulic accumulators with sorbent material"
co-supervisor: S. Ulbrich (TU Darmstadt)
candidate: Elisa Pontiroli (2020)

Master Thesis: " Calibration method for irrigation type problems"
co-supervisor: A. Massaccesi (Università di Padova)
candidate: Le Van Phu Cuong (2019)
Actual position: Post-Doc, Universität Heidelberg

Master Thesis: " A two species model for contact inhibition and proliferation of particles"
co-supervisor: D. Peurichard (Sorbonne Université)
candidate: Valeria Caliaro (2019)
Actual position: PhD student, INRIA Paris

Master Thesis: " A two species model for contact inhibition and proliferation of particles"
co-supervisor: S. Fratini, A. Ralko (INP Grenoble)
candidate: Erik Pillon (2019)
Actual position: PhD student, University of Luxembourg

Master Thesis: " Numerical assessment of the role of boundary conditions in patient-specific simulations of aortic diseases"
co-supervisor: A. Veneziani (Emory University, USA)
candidate: Anna Ferrarini (2018)
Actual position: PhD student, Università di Pavia

Master Thesis: " Hierarchical sparsity with non negativity constraint in large scale optimisation"
co-supervisor: A. Daducci (EPFL Lausanne)
candidate: Matteo Frigo (2016)
Actual position: PhD student, INRIA Nice Sophia Antipolis

Master Thesis: " Quantitative and numerical study of phenotype-structured equations modelling evolutionary dynamics in cancer cell populations"
co-supervisor: T. Lorenzi (St Andrews University)
candidate: Giada Fiandaca (2016)
Actual position: PhD student, Università di Torino, Post-doc, COSBI Trento, Post-doc INRIA Sophia Antipolis

Master Thesis: " Mathematical modelling of marine bacteriophages evolution"
co-supervisor: A. Korobeinikov (Universitat Autònoma de Barcelona)
candidate: Silvia Pagliarini (2016)
Actual position: PhD student, INRIA Bordeaux

Master Thesis: " Microscopic and macroscopic modelling of neural spike trains using age structured PDEs and point processes"
co-supervisor: P. Reynaud-Bouret (Université Nice Sophia Antipolis)
candidate: Valentina Mazzi (2016)

Actual position: PhD student, Università di Torino, research fellow (Rtd-A) in Bioingegneria, Università di Torino

Master Thesis: "DDFV methods and decomposition of domains: applications to fluid mechanics"

co-supervisor: T. Goudon, S. Krell (Université Nice Sophia Antipolis)

candidate: Giulia Lissoni (2016)

Actual position: PhD student, Université de Nice Sophia Antipolis, then post-doc at Université de Nantes

Master Thesis: "Super resolution of Fetal brain MRI and dMRI"

co-supervisor: M. Bach Cuadra (Universitat Autònoma de Barcelona)

candidate: Alessandro Mella (2016)

Actual position: PhD student, Università di Bologna, then data analyst at Terranova Software

Master Thesis: "A BMO-type scheme for the relativistic hyperbolic mean curvature flow"

Candidate: M. Bonafini (2015)

further positions: post-doc, TUM München

Master Thesis: "Variational methods in Image Processing for Impainting and Shadow removal"

Co-supervisor: S. Masnou (Lyon 1)

Candidate: S. Parisotto (2014)

further positions: PhD student, Department of Applied Mathematics and Theoretical Physics, University of Cambridge Post-Doc, Cambridge

Master Thesis: "High order edge elements and domain decomposition for Maxwell's equation"

Co-supervisor: F. Rapetti (Nice - Sophia Antipolis), V. Dolean (Glasgow)

Candidate: M. Bonazzoli (2014)

further positions: PhD student, Laboratoire Jean Dieudonné, Université de Nice - Sophia Antipolis, Chargée de recherche, INRIA, Université Paris Sud

Master Thesis: "Spectral methods for shape analysis"

Co-supervisor: U. Castellani (Verona)

Candidate: D. Boscaini (2013)

Actual position: PhD student, Università della Svizzera Italiana, Lugano, RTD-A Post-Doc researcher in computer Science, University of Trento