

Personal Information

Surname / First name
Date of Birth
e-mail
Webpage
Nationality
Languages

Colasuonno Francesca

5/12/1984
francesca.colasuonno@unito.it
<https://www.dipmatematica.unito.it/persona/francesca.colasuonno>
Italian
Italian (mother tongue), English (fluent), French (Good)

Current Position

1/7/2024 – today
Institution
Address

Associate Professor in Mathematical Analysis - SSD: MAT/05
Dipartimento di Matematica - Università degli Studi di Torino
via Carlo Alberto, 10 - 10123 Torino (TO)

Previous Positions

22/7/2024 – 12/11/2024
1/9/2023 – 30/6/2024
1/9/2020 – 31/8/2023
1/3/2018 – 31/8/2020
1/2/2017 – 28/2/2018
1/10/2015 – 31/1/2017
27/11/2014 – 26/11/2016
1/10/2013 – 31/12/2014
1/9/2012 – 28/2/2013

Maternity leave
Associate Professor in Mathematical Analysis - SSD: MAT/05; institution: Dipartimento di Matematica - Università di Bologna
Tenured Assistant Professor (RTdB) in Mathematical Analysis - SSD: MAT/05; institution: Dipartimento di Matematica - Università di Bologna
Untenured Assistant Professor (RTdA) in Mathematical Analysis - SSD: MAT/05; institution: Dipartimento di Matematica - Università di Torino
Post Doc Research Fellow; supervisor: Bruno Franchi; institution: Dipartimento di Matematica - Università di Bologna
Post Doc Research Fellow; supervisor: Denis Bonheure; institution: Département de Mathématique - Université Libre de Bruxelles ULB
Research Associate at Istituto per Applicazioni del Calcolo - CNR, Rome
Post Doc Research Fellow for EU funded project eVACUATE; supervisor: Elena De Angelis; institution: Dipartimento di Scienze Matematiche - Politecnico di Torino
Specialization Post-graduate Grant for Mathematics "Mino Bontempelli" 2012 given by Accademia Nazionale dei Lincei; supervisor: Patrizia Pucci; institution: Dipartimento di Matematica e Informatica - Università di Perugia

Education

6/6/2012
11/12/2008
5/10/2006

PhD in Mathematics, Università di Bari. Title: *Some Problems Involving the $p(x)$ -Polyharmonic Kirchhoff Operator*. Advisor: Patrizia Pucci.
Master Degree in Mathematics, Università di Bari. Title: *Alcuni problemi ellittici con crescita critica*. Advisors: Enrico Jannelli and Lorenzo D'Ambrosio. Final score: 110/110 cum laude
Bachelor Degree in Mathematics, Università di Bari. Title: *Il principio variazionale di Ekeland e il teorema del passo montano*. Advisor: Monica Lazzo. Final score: 110/110 cum laude.

Qualifications

18/6/2025–18/6/2037
27/7/2018–27/7/2027
Feb 2017 – Dec 2021
11/9/2013

ASN – Abilitazione Scientifica Nazionale per le funzioni di professore di I fascia in Analisi Matematica, Probabilità e Statistica Matematica
ASN – Abilitazione Scientifica Nazionale per le funzioni di professore di II fascia in Analisi Matematica, Probabilità e Statistica Matematica
Qualification aux fonctions de maître de conférences for sections 25 and 26 - Mathematics and Applied Mathematics
Teaching qualification: Tirocinio Formativo Attivo Class: A049, subject: Mathematics and Physics, Università di Bari

Prizes

2012

Specialization Post-graduate Grant for Mathematics "Mino Bontempelli" 2012 given by Accademia Nazionale dei Lincei - 6 months

Nov 2006

“Migliore Laureato della Facoltà di Scienze MM.FF.NN. A.A. 2005-2006” and Degree Award “UniCredit Banca Antonio Sarzana”

Research Activity

Research Interests

Nonlinear elliptic PDEs with variational methods

Problems with lack of compactness: Sobolev critical or supercritical problems, problems in unbounded domains. Existence and multiplicity of solutions with variational methods and ODE methods. Symmetry breaking results. A priori estimates. Asymptotic behaviors for varying parameters in the equations and solutions of elliptic problems as limits of corresponding evolutive systems.

Quasilinear problems governed by inhomogeneous p -Laplacian-type operators (e.g. double phase operator, $p(x)$ -Laplacian, (p, q) -Laplacian, mean curvature-type operators): existence, multiplicity and qualitative properties of solutions; variational eigenvalues and properties of the spectrum.

Higher order problems: polyharmonic problems, eigenvalue optimization, symmetry preservation.

Nonlocal problems: evolutive Kirchhoff-type problems (finite-time blow-up), fractional elliptic problems.

Projects

Coordinator

• INdAM-GNAMPA Project 2025: *Existence and Symmetry Breaking via Nonsmooth Critical Point Theory*, 3,5k€

• INdAM-GNAMPA Project 2019: *Il modello di Born-Infeld per l'elettromagnetismo nonlineare: esistenza, regolarità e molteplicità di soluzioni*, 3k€

Participant in PRIN projects

• PRIN 2022 P.I.: S. Terracini

• PRIN 2009 P.I.: V. Benci

Participant in INdAM-GNAMPA projects

• 2026: *Metodi variazionali e topologici tra Fisica, Geometria e Scienze Applicate* - P.I.: P. D'Avenia

• 2024: *New perspectives on Choquard equation through PDEs with local sources* - P.I.: C. Tarsi

• 2023: *Interplay between parabolic and elliptic PDEs* - P.I.: E. Terraneo

• 2022: *Studi asintotici in problemi parabolici ed ellittici* - P.I.: B. Noris

• 2020: *Problemi ai limiti per l'equazione della curvatura media prescritta* - P.I.: A. Boscaggin

• 2017: *Regolarità delle soluzioni viscosse per equazioni a derivate parziali non lineari degeneri* - P.I.: F. Ferrari

• 2016: *Fenomeni nonlocali: teoria, modelli e applicazioni* - P.I.: R. Bartolo

• 2011: *Principi di confronto, stime a priori e applicazioni* - P.I.: L. D'Ambrosio

• 2009: *Disuguaglianze di Harnack, stime a priori e potenziali per PDE quasilineari* - P.I.: L. D'Ambrosio

Participant in other projects

• Programma Alma Idea 2017 - Junior - P.I.: E. Mingione

• Mandat d'Impulsion Scientifique F.4508.14 (FNRS) : "Patterns, Phase Transitions, 4NLS et Blon" - P.I.: D. Bonheure (01.10.2015 – 28.2.2018)

Editorial board roles

2026 – today

Editor of **Applied Mathematics Letters** (Elsevier)

Scientific visits

2023

• Florida Institute of Technology, Melbourne, Florida, US (K. Perera); Marie Curie fellow - 1 month

2020

• Université Polytechnique Hauts-de-France, Valenciennes, France (C. De Coster) - 1 week

2019

• University of Trento, Italy (E. Vecchi) - 1 week

2018

• University of Bologna, Italy (E. Cinti and F. Ferrari) - 1 week

2017

• Université de Picardie Jules Verne, Amiens, France (B. Noris) - 1 week

2011

• University Babeş-Bolyai of Cluj-Napoca, Romania (Cs. Varga) - 1 week

• University of Trieste, Italy (E. Mitidieri) - 2 months

2010

• University Babeş-Bolyai of Cluj-Napoca, Romania (Cs. Varga) - 2 weeks

2009

• University of Perugia, Italy (P. Pucci) - 1,5 years

Invited Talks

2025

• *Symmetry breaking for semilinear elliptic problems*, Università Roma Tre, Roma, Italy

- *Existence and symmetry breaking for exponential problems in higher dimensions*, Nonlinear Viterbo, Università della Tuscia, Viterbo, Italy
- 2024
 - *Symmetry breaking for supercritical elliptic problems*, ECM2024, Sevilla, Spain
 - *Multiplicity and symmetry breaking for supercritical elliptic problems in exterior domains*, Two-day workshop on Nonlinear Analysis, Politecnico di Torino, Italy
 - *Multiplicity and symmetry breaking for supercritical elliptic problems*, Running START for Analysis, Università della Campania, Caserta, Italy
 - *Symmetry breaking for supercritical elliptic problems*, Women in Mathematics 2024. Recent developments in Calculus of Variations and PDE's, Palermo, Italy
- 2023
 - *Critical double phase problems*, International Doctoral Summer School in Conformal Geometry and Non-local Operators, Instituto de Matemáticas, Universidad de Granada, Spain
 - *Symmetry breaking for a supercritical elliptic problem in an annulus*, The 13th AIMS Conference, Wilmington, North Carolina, US
 - *A multiplicity result for a p -Laplacian supercritical Neumann problem*, The 13th AIMS Conference, Wilmington, North Carolina, US
 - *Symmetry breaking for a supercritical elliptic problem in an annulus*, Mathematical Sciences Colloquium, Florida Institute of Technology, Melbourne, Florida, US
- 2022
 - *Symmetry breaking for radial problems with lack of compactness*, Variational techniques for nonlinear elliptic problems, University of Perugia, Perugia, Italy
 - *Two solutions to a p -Laplacian supercritical Neumann problem: existence and asymptotics*, Equadiff15, Masaryk University, Brno, Czech Republic
 - *Two solutions on a Nehari set in an invariant cone*, 2022 AWM Research Symposium University of Minnesota, Minneapolis, USA
 - *Two solutions on a Nehari set to a supercritical Neumann problem*, PDEs in presence in Rome 2022, Rome, Italy
- 2021
 - *Nonradial solutions to supercritical problems in an annulus*, Lake Como School DEMP, Como, Italy
 - *Multiple oscillating BV-solutions for a mean-curvature Neumann problem*, 8th European Congress of Mathematics (8ECM), Portorož, Slovenia
 - *Multiple radial solutions for some Neumann problems*, Evolution Equations and Dynamical Systems, Universidade de São Paulo (USP), Instituto de Matemática e Estatística (IME) Instituto de Ciências Matemáticas e de Computação (ICMC)
 - *Positive oscillating solutions for some Neumann problems*, PDE's: Italia vs España, online
- 2020
 - *Soluzioni oscillanti di un problema di Neumann col p -laplaciano: da $p > 2$ a $p < 2$ passando dal caso semilineare*, DEG1 Webinars
- 2019
 - *Some radial supercritical Neumann problems*, Second days of nonlinear elliptic pdes in Haut-de-France, Université du Littoral Côte d'Opale, Calais, France
 - *Some supercritical problems with Neumann boundary conditions*, Something about nonlinear problems, University of Bologna, Italy
 - *Symmetry preservation for fourth order eigenvalue optimization problems*, analysis@polimi, Department of Mathematics, Polytechnic University of Milan, Italy
 - *Radial solutions for quasilinear supercritical Neumann problems*, Department of Mathematics, University of Trento, Italy
- 2018
 - *On the electrostatic Born-Infeld equation with point charges*, Viscosity and variational solutions of nonlinear PDEs, University of Bologna, Italy
 - *Radial solutions to p -Laplacian Neumann problems*, Two Nonlinear Days in Perugia - on the occasion of Patrizia Pucci's 65th birthday, University of Perugia, Italy
- 2017
 - *Existence and multiplicity of solutions for p -Laplacian supercritical Neumann problems*, Seminari di Analisi AA 2017/2018, Department of Mathematics and Computer Science, University of Ferrara, Italy
 - *On the electrostatic Born-Infeld equation with point charges*, Séminaires A³ d'analyse, Université de Picardie Jules Verne, Amiens, France
 - *Radial positive solutions for p -Laplacian supercritical Neumann problems*, Seminari di Analisi Matematica Bruno Pini, Department of Mathematics, University of Bologna, Italy
- 2016
 - *A p -Laplacian supercritical Neumann problem*, Bru-To PDE's Conference, Department of Mathematics, University of Turin, Italy
- 2015
 - *Autovalori per problemi ad esponenti variabili*, Colloqui Matematici, Department of Mathematics, University of Bari, Italy

- 2014 • *On a kinetic approach for crowd evacuation from bounded domains*, Seminari di analisi matematica, Department of Mathematics, University of Turin, Italy
- 2012 • *Esistenza di soluzioni e analisi qualitativa di alcuni problemi di evoluzione*, Xmaths Workshop, University of Bari, Italy
- 2011 • *Multiplicity of Solutions for $p(x)$ -Polyharmonic Elliptic Kirchhoff Equations*, International Conference on Nonlinear Operators, Differential Equations and Applications, University Babeş-Bolyai of Cluj-Napoca, Romania

Other communications and posters

- 2023 • *Symmetry breaking for a supercritical elliptic problem in an annulus*, Seminari di Analisi Matematica Bruno Pini, Department of Mathematics, University of Bologna, Italy
- 2019 • *Radial solutions to second-order and fourth-order elliptic problems*, Giornata di benvenuto, University of Turin, Italy
- *Problemi quasilineari supercritici con condizioni di Neumann al bordo*, XXI Congresso U.M.I., Pavia, Italy
- *Radial solutions for supercritical Neumann problems*, Intensive Week of PDEs@Cogne, Cogne, Italy
- 2018 • *Multiplicity of radial solutions for quasilinear supercritical Neumann problems*, Autumn workshop in Lisbon, Universidade de Lisboa, Portugal
- *Some results on the Born-Infeld equation with point charges*, Seminari di Analisi Matematica, University of Turin, Italy
- 2015 • *A Nonlocal Eigenvalue Problem in the Framework of Double Phase Variational Integrals*, Séminaire A^N_{EDP} - Analyse non linéaire et EDP, Université Libre de Bruxelles, Belgium
- *Stabilità degli autovalori variazionali per problemi ad esponenti variabili*, XX Congresso dell'Unione Matematica Italiana, Siena, Italy
- 2014 • *A Kinetic Model of Crowd Evacuation from Bounded Domains*, SIMAI 2014, Taormina, Italy
- 2012 • *Lifespan Estimates for Solutions of Kirchhoff Problems*, Happy Hour of Math, Hausdorff Institute for Mathematics (HIM), Bonn, Germany
- *Poster: Multiple Solutions for Eigenvalue Problems Involving p -Laplacian Type Operators*, Workshop on Nonlinear Partial Differential Equations, University of Perugia, Italy
- *Some Problems Involving the Polyharmonic Kirchhoff Operator*, University of Bari, Italy
- 2011 • *Molteplicità di soluzioni per equazioni ellittiche poliarmoniche di Kirchhoff*, I seminari del dipartimento, University of Perugia, Italy
- *Poster: Multiplicity of Solutions for possibly degenerate $p(x)$ -Polyharmonic Elliptic Kirchhoff Equations*, Higher order equations in Geometry and Physics, SISSA, Trieste, Italy
- *Poster: Multiplicity of Solutions for $p(x)$ -Polyharmonic Elliptic Kirchhoff Equations*, Variational and Perturbative Methods for Nonlinear Differential Equations, Venezia, Italy
- 2010 • *Global Nonexistence and Blow up for Nonlinear Polyharmonic Kirchhoff Systems*, Spring School in Nonlinear Partial Differential Equations, – Université Libre de Bruxelles, Belgium

Conference organization

- 20 – 24/7/2026 *EWM-EMS Summer School: Symmetry and Symmetry Breaking in Sweden*, Institut Mittag-Leffler, Stockholm, Sweden. Website: <https://www.mittag-leffler.se/activities/ewm-ems-summer-school-symmetry-and-symmetry-breaking-in-sweden/>
- 3 – 4/7/2025 *Nonlinear Meeting in Turin 2025*, Department of Mathematics, University of Turin
- 6 – 7/6/2022 *Nonlinear Meeting in Bologna 2022*, Department of Mathematics, University of Bologna. Website: <https://events.unibo.it/nlm-math-bologna-2022>
- 14 – 18/9/2020 *INdAM Workshop Nonlinear phenomena: between ODEs and PDEs*, INdAM funding (13 k€), online event due to the pandemic (around 50 participants). Website: <https://sites.google.com/view/nop2020/home>
- Postponed to 7 – 9/6/2021
- 31/1 – 1/2/2019 *Nonlinear Meeting in Turin 2019*, Department of Mathematics, University of Turin. Website: <https://sites.google.com/view/nlmt2019/>
- 10 – 11/5/2018 *Advanced Lectures in Nonlinear Analysis*, Department of Mathematics, University of Turin. Website: <https://sites.google.com/view/alna-2018>
- 24 – 27/1/2018 *Sub-Riemannian Geometry, Harmonic Analysis, PDE and Applications*, Accademia delle Scienze, Bologna. Website: <https://events.unibo.it/sub-riemannian-geometry-pde>
- 27/5 – 1/6/2013 Section of four minicourses at the *5th European Women in Mathematics Summer School*, ICTP, Trieste. Website: <https://www.europeanwomeninmaths.org/activity/women-in-mathematics-summer-school-ictp-2013/>

May – Aug 2012

Happy Hour of Math, during the Trimester Program: “Mathematical challenges of materials science and condensed matter physics: From quantum mechanics through statistical mechanics to nonlinear pde”, Bonn. Website: <https://www.him.uni-bonn.de/programs/past-programs/past-trimester-programs/mathematical-challenges/happy-hour-of-math/>

22 – 25/5/2012

8-th International Conference on Non-Euclidean Geometry in Modern Physics and Mathematics (the Bolyai-Gauss-Lobachevsky Conference, BGL-8), Institute of Electron Physics, Ukrainian National Academy of Sciences, Uzhgorod, Ukraine. Website: http://iep.org.ua/content/conferenc/bgl_2012/

Member of committees in selection procedures

2022

Evaluator for UNA4CAREER, the MSCA-COFUND postdoctoral recruitment program in the Complutense University of Madrid, Spain

2020

Member of the recruitment committee of two postdoc fellows in Mathematical Analysis (MAT/05), Department of Mathematics, of University of Turin, Italy

2018

Member of the recruitment committee for two grants funded by the ERC - P.I. S. Terracini, Department of Mathematics, University of Turin, Italy

Reviewer of Research Projects

2023

Reviewer of a proposal presented at Research Funding Call, Sapienza, University of Rome.

Review activity

Reviewer for *Mathematical Reviews/MathSciNet*

Referee for the following journals/series: *Acta Applicandae Mathematicae*, *Advances in Mathematical Physics*, *Advances in Nonlinear Analysis*, *Analysis & Applications*, *Analysis and Mathematical Physics*, *Applicable Analysis*, *Boundary Value Problems*, *British Journal of Mathematics & Computer Science*, *Bulletin des sciences mathématiques*, *Bulletin of the Belgian Mathematical Society*, *Bulletin of the Malaysian Mathematical Sciences Society*, *Calculus of Variations and Partial Differential Equations*, *Complex variables and Elliptic Equations*, *Differential and Integral Equations*, *Discrete and Continuous Dynamical Systems*, *Discrete and Continuous Dynamical Systems - Series S*, *Electronic Journal of Differential Equations*, *Electronic Journal of Qualitative Theory of Differential Equations*, *Qualitative Theory of Dynamical Systems*, *Journal de Mathématiques Pures et Appliquées*, *Journal of Applied Mathematics and Informatics*, *Journal of Differential Equations*, *Journal of Geometric Analysis*, *Journal of Mathematical Analysis and Applications*, *Journal of Fixed Point Theory and Applications*, *Journal of Mathematical Physics*, *Mathematica Bohemica*, *Mathematical Methods in the Applied Sciences*, *Mathematics in Engineering*, *Mathematische Nachrichten*, *Mediterranean Journal of Mathematics*, *Nonlinear Analysis Series A: Theory, Methods & Applications*, *Nonlinearity*, *Partial Differential Equations and Applications*, *Proceedings of the London Mathematical Society*, *Rendiconti dell'Istituto di Matematica dell'Università di Trieste*, *Revista Matemática Complutense*, *Springer series "Trends in Mathematics"*, *Topological Methods in Nonlinear Analysis*, *Zeitschrift für angewandte Mathematik und Physik*

Other professional activities

Institutional appointments

Jun 2021 - Sep 2023

Member of the “Giunta del Dipartimento di Matematica” of Università di Bologna, Italy

2014

Postdoc representative at DISMA - Politecnico di Torino, Italy

Memberships

2009 – present

Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni (GNAMPA-INdAM)

2010 – present

Unione Matematica Italiana (UMI)

2020 – 2021 and 2024

European Mathematical Society (EMS)

27/11/2014 – 26/11/2016

Research associate of Istituto per Applicazioni del Calcolo “Mauro Picone” - Consiglio Nazionale delle Ricerche (IAC - CNR), Rome

2012 – 2014

Società Italiana di Matematica Applicata e Industriale (SIMAI) and *Gruppo di attività per i Sistemi Complessi* (SisCo)

Teaching activity

PhD students supervision

11/2025–

Ricardo Alfonso Ziegele Aliaga, co-supervised with Alberto Boscaggin – Mathematics (Unito)

Bachelor theses supervision

25/11/2020 **Federica Lorenzo** – Bachelor thesis in Mathematics (Unito)
Thesis topic: *The finite-dimensional Mountain Pass Theorem and the Global Invertibility Theorem*

20/07/2020 **Elena Rossino** – Bachelor thesis in Mathematics (Unito)
Thesis topic: *The Hausdorff measure and fractals*

20/07/2020 **Francesca Fiorito** – Bachelor thesis in Mathematics (Unito)
Thesis topic: *Classical methods in the Calculus of Variations*

02/04/2020 **Marco Issam Caviglia** – Bachelor thesis in Mathematics (Unito)
Thesis topic: *The Euler Gamma function and its applications*

Seminars addressed to students

16/12/2020 “*Topics in Mathematics*”, addressed to PhD students of Mathematics, University of Bologna, online. Title of the seminar: *Variational problems and the Mountain Pass Theorem*

22/10/2018 and 21/10/2019 “*Mezza giornata di orientamento*”, addressed to undergraduate students of Mathematics, Turin, Italy. Title of the seminar: *Problemi Variazionali: quando i punti critici risolvono i problemi*

Member of graduation committees

a.y. 2019-2020 Member of 1 BSc and 1 MSc thesis committees, Department of Mathematics, University of Turin, Italy

a.y. 2018-2019 Member of 1 BSc and 1 MSc thesis committees, Department of Mathematics, University of Turin, Italy

PhD courses

Holder

Spring 2025 **Some Problems with Lack of Compactness**, 15h - PhD Program in Mathematics - University of Turin

Spring 2023 **Problems with Lack of Compactness**, 16h - PhD Program in Mathematics - University of Bologna
<https://phd.unibo.it/matematica/en/teaching/2022-2023>

Undergraduate courses

Co-holder

a.y. 2025/2026 **Analisi Matematica 1**, Fall, Mathematics for Economics, Finance, and Insurance - University of Turin

Analisi Matematica, Spring, Computer Sciences - University of Turin

Metodi Variazionali, Spring, Mathematics - University of Turin

Analisi Matematica, Spring, Computer Sciences - University of Turin

Holder

a.y. 2023/2024 **Analisi Matematica 1**, Fall and Spring, Physics - University of Bologna

a.y. 2022/2023 **Complementi di Analisi Matematica ed Elementi di Calcolo delle Probabilità T** Spring, Civil Engineering and Environmental Engineering - University of Bologna

a.y. 2021/2022 **Complementi di Analisi Matematica ed Elementi di Calcolo delle Probabilità T** Spring, Civil Engineering and Environmental Engineering - University of Bologna

a.y. 2020/2021 **Complementi di Analisi Matematica ed Elementi di Calcolo delle Probabilità T** Spring, Civil Engineering and Environmental Engineering - University of Bologna

a.y. 2017/2018 **Crash Course in Mathematics**, Fall, School: Economics, Management, and Statistics - University of Bologna

a.y. 2012/2013 **Analisi Matematica II**, Spring, I Faculty of Engineering - Polytechnic University of Bari

Teaching assistant

a.y. 2019/2020 **Analisi Matematica I A and B**, Fall, Physics - University of Turin

Analisi Matematica 3, Fall, Mathematics - University of Turin

a.y. 2018/2019 **Analisi Matematica I A and B**, Fall, Physics - University of Turin

Analisi Matematica 3, Fall, Mathematics - University of Turin

a.y. 2017/2018 **Analisi Matematica**, Spring, School of Natural Sciences - Computer Sciences - University of Turin

Tutor

a.y. 2017/2018 **Analisi Matematica T-A**, Fall, Faculty of Engineering - University of Bologna

Publications

Research papers

34) **A. Boscaggin, F. Colasuonno, B. Noris, F. Sani**, *An Orlicz space approach to exponential elliptic problems in higher dimensions*, Calc. Var., in press, arXiv:2503.16105

33) **F. Colasuonno, K. Perera**, *Critical growth double phase problems: the local case and a Kirchhoff type case*, J. Differential Equations, 2025, 422, 426–488

- 32) **F. Colasuonno, B. Noris, E. Sovrano**, *Continuous dependence for p -Laplace equations with varying operators*, Discrete Contin. Dyn. Syst. Ser. S, 2025, 18(6), pp. 1561–1573
- 31) **F. Colasuonno, M. Winkler**, *Stability vs. instability of singular steady states in the parabolic-elliptic Keller-Segel system on \mathbb{R}^n* , Ann. Sc. Norm. Super. Pisa Cl. Sci. (5), Vol. XXVI (2025), 1313-1347
- 30) **A. Boscaggin, F. Colasuonno, B. Noris, T. Weth**, *Multiplicity and symmetry breaking for supercritical elliptic problems in exterior domains*, Nonlinearity, 2024, 37(10), 105012 (26pp)
- 29) **F. Colasuonno**, *Corrigendum: Multiple solutions for asymptotically q -linear (p, q) -Laplacian problems*, Math. Meth. Appl. Sci., 2024, 47(4), 2500–2502
- 28) **E. Cinti, F. Colasuonno**, *Existence and non-existence results for a semilinear fractional Neumann problem*, NoDEA Nonlinear Differential Equations Appl., 2023, 30(6), Paper No. 79
- 27) **F. Colasuonno, B. Noris**, *Asymptotics for a high-energy solution of a supercritical problem*, Nonlinear Anal., 2023, 227 113166
- 26) **F. Colasuonno, F. Ferrari, P. Gervasio, A. Quarteroni** *Some evaluations of the fractional p -Laplace operator on radial functions*, Math. Eng., 2023, 5(1), 1–23
- 25) **A. Boscaggin, F. Colasuonno, B. Noris, T. Weth**, *A supercritical elliptic equation in the annulus*, Ann. Inst. H. Poincaré Anal. Non Linéaire, 2023, 40(1), 157–183
- 24) **F. Colasuonno, B. Noris, G. Verzini**, *Multiplicity of solutions on a Nehari set in an invariant cone*, Minimax Theory Appl., 2022, 7(2), 185–206
- 23) **F. Colasuonno**, *Multiple solutions for asymptotically q -linear (p, q) -Laplacian problems*, Math. Meth. Appl. Sci., 2022, 45(14), 8655–8673
- 22) **A. Boscaggin, F. Colasuonno, C. De Coster**, *Multiple bounded variation solutions for a prescribed mean curvature equation with Neumann boundary conditions*, J. Differential Equations, 2021, 285, 607–639
- 21) **E. Cinti, F. Colasuonno**, *A nonlocal supercritical Neumann problem*, J. Differential Equations, 2020, 268(5), 2246–2279
- 20) **F. Colasuonno, F. Ferrari**, *The Soap Bubble Theorem and a p -Laplacian overdetermined problem*, Comm. Pure Appl. Anal., 2020, 19(2), 983–1000
- 19) **A. Boscaggin, F. Colasuonno, B. Noris**, *Multiplicity of solutions for the Minkowski-curvature equation via shooting method*, Bruno Pini Math. Anal. Semin., 2020, 11(1) 1–17
- 18) **A. Boscaggin, F. Colasuonno, B. Noris**, *Positive radial solutions for the Minkowski-curvature equation with Neumann boundary conditions*, Discrete Contin. Dyn. Syst. Ser. S, 2020, 13(7), 1921–1933
- 17) **A. Boscaggin, F. Colasuonno, B. Noris**, *A priori bounds and multiplicity of positive solutions for p -Laplacian Neumann problems with sub-critical growth*, Proc. Roy. Soc. Edinburgh Sect. A, 2020, 150(1), 73–102
- 16) **F. Colasuonno, E. Vecchi**, *Symmetry and rigidity for the hinged composite plate problem*, J. Differential Equations, 2019, 266(8), 4901–4924
- 15) **D. Bonheure, F. Colasuonno, J. Földes**, *On the Born-Infeld equation for electrostatic fields with a superposition of point charges*, Ann. Mat. Pura Appl., 2019, 198(3), 749–772
- 14) **F. Colasuonno, E. Vecchi**, *Symmetry in the composite plate problem*, Commun. Contemp. Math., 2019, 21(02) 1850019
- 13) **A. Boscaggin, F. Colasuonno, B. Noris**, *Multiple positive solutions for a class of p -Laplacian Neumann problems without growth conditions*, ESAIM Control Optim. Calc. Var., 2018, 24(4) 1625–1644
- 12) **F. Colasuonno, B. Noris**, *Radial positive solutions for p -Laplacian supercritical Neumann problems*, Bruno Pini Math. Anal. Semin., 2017, 8, 55–72
- 11) **F. Colasuonno, B. Noris** *A p -Laplacian supercritical Neumann problem*, Discrete Contin. Dyn. Syst., 2017, 37(6), 3025–3057
- 10) **F. Colasuonno, A. Iannizzotto, D. Mugnai**, *Three solutions for a Neumann partial differential inclusion via nonsmooth Morse theory*, Set-Valued Var. Anal., 2017, 25(2), 405–425
- 9) **F. Colasuonno, M. Squassina**, *Eigenvalues for double phase variational integrals*, Ann. Mat Pura Appl., 2016, 195(6), 1917–1959
- 8) **N. Bellomo, F. Colasuonno, D. A. Knopoff, J. Soler**, *From a systems theory of sociology to modeling the onset and evolution of criminality*, Netw. Heterog. Media, 2015, 10(3), 421–441
- 7) **F. Colasuonno, M. Squassina**, *Stability of eigenvalues for variable exponent problems*, Nonlinear Anal., 2015, 123–124, 56–67
- 6) **J. P. Agnelli, F. Colasuonno, D. A. Knopoff**, *A kinetic theory approach to the dynamics of crowd evacuation from bounded domains*, Math. Models Methods Appl. Sci., 2015, 25(1), 109–129
- 5) **G. Autuori, F. Colasuonno, P. Pucci**, *On the existence of stationary solutions for higher-order p -Kirchhoff problems*, Commun. Contemp. Math., 2014, 16(5), 1450002

- 4) **F. Colasuonno, P. Pucci, Cs. Varga**, *Multiple solutions for an eigenvalue problem involving p -Laplacian type operators*, *Nonlinear Anal.*, 2012, 75(12), 4496–4512
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Bibliometrics

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