

Personal Information

Surname / First name

Date of Birth

e-mail

Webpage

Nationality

Languages

Current Position

1/7/2024 – today

Institution

Address

22/7/2024 – 12/11/2024

Previous Positions

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

Education

6/6/2012

11/12/2008

5/10/2006

Qualifications

27/7/2018–27/7/2027

Feb 2017 – Dec 2021

11/9/2013

Awards

2012

Nov 2006

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)

Associate Professor in Mathematical Analysis - SSD: MAT/05

Dipartimento di Matematica - Università degli Studi di Torino

via Carlo Alberto, 10 - 10123 Torino (TO)

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

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.

ASN – Abilitazione Scientifica Nazionale per la funzione 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

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

"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

- 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

- 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

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

2012

- Hausdorff Research Institute for Mathematics (HIM), Bonn, Germany, (J.J.L. Velázquez) - 4 months

2011

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

- 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

2024

- *Symmetry breaking for supercritical elliptic problems*, ECM2024, Sevilla, Spain
- *Multiplicity and symmetry breaking for supercritical elliptic problems in exterior domains*, Giornate di Analisi Nonlineare, 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
 - *Nonradial solutions to supercritical problems in an annulus*, Lake Como School DEMP, Como, Italy
- 2021
 - *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

2018	<ul style="list-style-type: none"> • <i>Radial solutions for supercritical Neumann problems</i>, Intensive Week of PDEs@Cogne , Cogne, Italy • <i>Multiplicity of radial solutions for quasilinear supercritical Neumann problems</i>, Autumn workshop in Lisbon, Universidade de Lisboa, Portugal • <i>Some results on the Born-Infeld equation with point charges</i>, Seminari di Analisi Matematica, University of Turin, Italy
2015	<ul style="list-style-type: none"> • <i>A Nonlocal Eigenvalue Problem in the Framework of Double Phase Variational Integrals</i>, Séminaire A^N_{EDP} - Analyse non linéaire et EDP, Université Libre de Bruxelles, Belgium • <i>Stabilità degli autovalori variazionali per problemi ad esponenti variabili</i>, XX Congresso dell'Unione Matematica Italiana, Siena, Italy
2014	<ul style="list-style-type: none"> • <i>A Kinetic Model of Crowd Evacuation from Bounded Domains</i>, SIMAI 2014, Taormina, Italy
2012	<ul style="list-style-type: none"> • <i>Lifespan Estimates for Solutions of Kirchhoff Problems</i>, Happy Hour of Math, Hausdorff Institute for Mathematics (HIM), Bonn, Germany • <i>Poster: Multiple Solutions for Eigenvalue Problems Involving p-Laplacian Type Operators</i>, Workshop on Nonlinear Partial Differential Equations, University of Perugia, Italy • <i>Some Problems Involving the Polyharmonic Kirchhoff Operator</i>, University of Bari, Italy
2011	<ul style="list-style-type: none"> • <i>Molteplicità di soluzioni per equazioni ellittiche poliarmoniche di Kirchhoff</i>, I seminari del dipartimento, University of Perugia, Italy • <i>Poster: Multiplicity of Solutions for possibly degenerate $p(x)$-Polyharmonic Elliptic Kirchhoff Equations</i>, Higher order equations in Geometry and Physics, SISSA, Trieste, Italy • <i>Poster: Multiplicity of Solutions for $p(x)$-Polyharmonic Elliptic Kirchhoff Equations</i>, Variational and Perturbative Methods for Nonlinear Differential Equations, Venezia, Italy
2010	<ul style="list-style-type: none"> • <i>Global Nonexistence and Blow up for Nonlinear Polyharmonic Kirchhoff Systems</i>, Spring School in Nonlinear Partial Differential Equations, – Université Libre de Bruxelles, Belgium
Conference organization	
3 – 4/7/2025	<i>Nonlinear Meeting in Turin 2025</i> , Department of Mathematics, University of Turin
6 – 7/6/2022	<i>Nonlinear Meeting in Bologna 2022</i> , Department of Mathematics, University of Bologna. Website: https://events.unibo.it/nlm-math-bologna-2022
14 – 18/9/2020 Postponed to 7 – 9/6/2021	INdAM Workshop <i>Nonlinear phenomena: between ODEs and PDEs</i> , INdAM funding (13 k€), online event due to the pandemic (around 50 participants). Website: https://sites.google.com/view/nop2020/home
31/1 – 1/2/2019	<i>Nonlinear Meeting in Turin 2019</i> , Department of Mathematics, University of Turin. Website: https://sites.google.com/view/nlmt2019/
10 – 11/5/2018	<i>Advanced Lectures in Nonlinear Analysis</i> , Department of Mathematics, University of Turin. Website: https://sites.google.com/view/alna-2018
24 – 27/1/2018	<i>Sub-Riemannian Geometry, Harmonic Analysis, PDE and Applications</i> , Accademia delle Scienze, Bologna. Website: https://events.unibo.it/sub-riemannian-geometry-pde
27/5 – 1/6/2013	Section of four minicourses at the <i>5th European Women in Mathematics Summer School</i> , ICTP, Trieste. Website: https://www.europeanwomeninmaths.org/activity/women-in-mathematics-summer-school-ictp-2013/
May – Aug 2012	<i>Happy Hour of Math</i> , 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	<i>8-th International Conference on Non-Euclidean Geometry in Modern Physics and Mathematics (the Bolyai-Gauss-Lobachevsky Conference, BGL-8)</i> , 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 of the Belgian Mathematical Society*, *Bulletin of the Malaysian Mathematical Sciences Society*, *Complex variables and Elliptic Equations*, *Differential and Integral Equations*, *Discrete and Continuous Dynamical Systems - Series S*, *Electronic Journal of Differential Equations*, *Electronic Journal of Qualitative Theory of Differential Equations*, *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
2014

Member of the "Giunta del Dipartimento di Matematica" of Università di Bologna, Italy
Postdoc representative at DISMA - Politecnico di Torino, Italy

Memberships

2009 – present
2010 – present
2020 – 2021 and 2024
27/11/2014 – 26/11/2016
2012 – 2014

Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni (GNAMPA-INdAM)
Unione Matematica Italiana (UMI)
European Mathematical Society (EMS)
Research associate of Istituto per Applicazioni del Calcolo "Mauro Picone" - Consiglio Nazionale delle Ricerche (IAC - CNR), Rome
Società Italiana di Matematica Applicata e Industriale (SIMAI) and *Gruppo di attività per i Sistemi Complessi* (SisCo)

Teaching activity

Bachelor theses supervision

25/11/2020
20/07/2020
20/07/2020
02/04/2020

Federica Lorenzo – Bachelor thesis in Mathematics (Unito)
Thesis topic: *The finite-dimensional Mountain Pass Theorem and the Global Invertibility Theorem*
Elena Rossino – Bachelor thesis in Mathematics (Unito)
Thesis topic: *The Hausdorff measure and fractals*
Francesca Fiorito – Bachelor thesis in Mathematics (Unito)
Thesis topic: *Classical methods in the Calculus of Variations*
Marco Issam Caviglia – Bachelor thesis in Mathematics (Unito)
Thesis topic: *The Euler Gamma function and its applications*

Seminars addressed to students

16/12/2020
22/10/2018 and 21/10/2019

"*Topics in Mathematics*", addressed to PhD students of Mathematics, University of Bologna, online. Title of the seminar: *Variational problems and the Mountain Pass Theorem*
"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
a.y. 2018-2019

Member of 1 BSc and 1 MSc thesis committees, Department of Mathematics, University of Turin, Italy
Member of 1 BSc and 1 MSc thesis committees, Department of Mathematics, University of Turin, Italy

PhD courses

Holder
Spring 2025
Spring 2023

Some Problems with Lack of Compactness, 15h - PhD Program in Mathematics - University of Turin
Problems with Lack of Compactness, 16h - PhD Program in Mathematics - University of Bologna
<https://phd.unibo.it/matematica/en/teaching/2022-2023>

Undergraduate courses

<u>Holder</u>	
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
<u>Teaching assistant</u>	
a.y. 2019/2020	Analisi Matematica I A and B , Fall, Physics - University of Turin
a.y. 2019/2020	Analisi Matematica 3 , Fall, Mathematics - University of Turin
a.y. 2018/2019	Analisi Matematica I A and B , Fall, Physics - University of Turin
a.y. 2018/2019	Analisi Matematica 3 , Fall, Mathematics - University of Turin
a.y. 2017/2018	Analisi Matematica , Spring, School of Natural Sciences - Computer Sciences - University of Turin
<u>Tutor</u>	
a.y. 2017/2018	Analisi Matematica T-A , Fall, Faculty of Engineering - University of Bologna

Publications

Research papers

- 32) **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)
- 31) **F. Colasuonno, B. Noris, E. Sovrano**, *Continuous dependence for p -Laplace equations with varying operators*, *Discrete Contin. Dyn. Syst. Ser. S*, 2024, DOI:10.3934/dcdss.2024121
- 30) **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)*, 2023, DOI: 10.2422/2036-2145.202303_006, arXiv:2309.15633
- 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
- 3) **G. Autuori, F. Colasuonno, P. Pucci**, *Blow up at infinity of solutions of polyharmonic Kirchhoff systems*, Complex Var. Elliptic Equ., 2012, 57(2–4), 379–395
- 2) **G. Autuori, F. Colasuonno, P. Pucci**, *Lifespan estimates for solutions of polyharmonic Kirchhoff systems*, Math. Models Methods Appl. Sci., 2012, 22(2), 1150009-1
- 1) **F. Colasuonno, P. Pucci**, *Multiplicity of solutions for $p(x)$ -polyharmonic elliptic Kirchhoff equations*, Nonlinear Anal., 2011, 74(17), 5962–5974

Conference proceedings

- 2) **F. Colasuonno**, *A p -Laplacian Neumann problem with a possibly supercritical nonlinearity*, Rend. Semin. Mat. Univ. Politec. Torino, Bruxelles-Torino Talks in PDE's Turin, May 2–5, 2016, 74(2), 113–122
- 1) **F. Colasuonno, M. C. Salvatori**, *Existence and uniqueness of solutions to a Cauchy problem modeling the dynamics of socio-political conflicts*, Recent Trends in Nonlinear Partial Differential Equations I: Evolution Problems, Series Cont. Math. AMS, Providence, USA, Serrin J.B., Mitidieri E.L., e Radulescu V.D., Eds., 2013, 594, 155–165

Submitted papers

- 1) **F. Colasuonno, K. Perera**, *Critical growth double phase problems: the local case and a Kirchhoff type case*, 2024, arXiv:2306.04762

Bibliometrics

H-index 12 (source: Scopus)
Total citations 879 (source: Scopus)

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