

Curriculum Vitae

Name and Surname: Paola Rubbioni

Place and date of birth: Perugia, 16/09/1968

Citizenship: Italian

Marital status: Married, 3 kids

Academic excursus

01/12/2017-today: Professore II Fascia (Associate Professor) SD: MATH-03/A - Analisi matematica, GSD: 01/MATH-03 - ANALISI MATEMATICA, PROBABILITÀ E STATISTICA MATEMATICA, Università degli Studi di PERUGIA

06/09/1997-30/11/2017: Ricercatore Universitario (University Researcher) S.S.D. MAT/05, Università degli Studi di PERUGIA

Main research interests

Solutions of differential equations and inclusions with delay. Stability of solutions for functional differential equations and for integro-differential equations. Solutions of differential equations and inclusions with impulses.

Member of editorial boards of international journals

Fixed Point Theory - ISSN 1583-5022 (Print); ISSN 2066-9208 (Online);

Journal of Function Spaces (06/2021-12/2022) - ISSN: 2314-8896 (Print); ISSN: 2314-8888 (Online);

Studia Universitatis Babeş-Bolyai Mathematica - ISSN: 2065-961x.

Participation in the activities of a funded research group

Associated Investigator of project PRIN2022 "Nonlinear differential problems with applications to real phenomena" (coord. Prof. Gabriele Bonanno)

Coordinator of project GNAMPA 2013 "Metodi Topologici per Problemi Differenziali Nonlineari ed applicazioni"

Coordinator of project "Giovani Ricercatori 2000" Ateneo di Perugia, Inclusioni Differenziali Funzionali in Spazi di Banach

Member of projects PRIN2009, PRIN2007, PRIN2005, PRIN2003 - Equazioni Differenziali Ordinarie e Applicazioni, coord. Prof. Fabio Zanolin

Member of projects GNAMPA 2001-2005, 2011-2017, 2019-2022

Organization of international conferences (last 5 years)

Recent Advances in Nonlinear Differential Problems and Applications (RANDPA 2025), Perugia, 04-06/06/2025

Minisimposium "Qualitative Theory and Applications of Boundary Value Problems for Nonlinear ODEs and PDEs (MS ID-22)", within the 9th European Congress of Mathematics, Sevilla, Spain, 15-19/07/2024

Two Days Workshop on Nonlinear Analysis @ MS Teams, online via MS Teams, 2-3/09/2021

Minisymposium "Topological Methods in Differential Equations (MS ID-13)", within the 8th European Congress of Mathematics, Portorož, Slovenia, 20-26/06/2021

Member of the Scientific Committee of international conferences

International Workshop on Nonlinear Analysis & its Applications, Badshahithaul (Tehri Garhwal), India, December 14-16, 2023

Invited talks at international conferences (last 5 years)

Main speaker at: Functional Analysis: Methods and Applications (FAMA2024), Amantea and Rende (Cosenza), 06-08/06/2024. Title: *Differential problems with distributed delay: existence and asymptotic stability of solutions*

Plenary speaker at: International Workshop on Nonlinear Analysis & its Applications, Badshahithaul (Tehri Garhwal), India (virtual), December 14-16, 2023. Title: *Differential equations with distributed delay: existence and asymptotic stability of solutions.*

Main speaker at: The 14th international conference on Fixed Point Theory and its Applications, Brasov, Romania, July 11-14, 2023. Title: *Solutions to differential equations with distributed delay.*

Main speaker at: Workshop su Equazioni Differenziali Ordinarie non lineari, Messina, January 12-13, 2023. Title: *Asymptotic stability of solutions of differential equations with distributed delay.*

Invited speaker at: Equadiff 15, Brno, Repubblica Ceca, July 11-15, 2022, Minisymposium ODE-07 Asymptotic theory of differential and integral equations (coord. P. Rehak and S. Matucci). Title: *Asymptotic stability of solutions of differential equations with delay.*

Invited speaker at: Topological Methods in Nonlinear Analysis: Recent Advances, Professeur Andrzej Granas Memorial Conference, Montréal, Canada, and online, July 4-8, 2022. Title: *Existence and asymptotic stability of solutions of differential equations with delay.*

PhD activity

Member of the Collegio Docenti of Dottorato in Matematica, Informatica, Statistica, Firenze-Perugia-Indam, Curriculum di MATEMATICA, from XXXVII ciclo (a.y. 2021/22) up today

Teacher of a 15 hours-slot to "Topological Methods for Differential Equations", PhD program of Dottorato in Matematica, Informatica, Statistica, Firenze-Perugia-Indam, Curriculum di MATEMATICA, XXXVII ciclo and XXXVIII ciclo, a.y. 2021/22 and 2022/23

Teacher of a 15 hours-slot to "EDO semilineari in spazi di Banach e applicazioni", PhD program of Dottorato in Matematica, Informatica, Statistica, Firenze-Perugia-Indam, Curriculum di MATEMATICA, XXXVI ciclo, a.y. 2020/21

Commissioner in the PhD final examination of the Dottorato in Matematica, Informatica, Statistica, Firenze-Perugia-Indam, Curriculum di MATEMATICA (16/04/21; 08/06/21; 20/09/21)

Referee to the PhD Thesis by Dr. Francesco Salvatore Genoese (supervisor Prof. Filippo Domenico Cammaroto), University consortium Catania-Messina-Palermo

Referee to the PhD Thesis by Dr. Hajer Garbout (supervisor Prof. Afif Ben Amar), Ecole doctorale des sciences fondamentales, Université de Sfax, Tunisie

Supervisor of the PhD Thesis by Dr. Francesco Portigiani (defended: 12/02/2009), University of Modena e Reggio Emilia

Scientific and educational seminars (last 5 years)

- 17/04/2024 - Scientific seminar entitled "*Existence and asymptotic stability of solutions to differential equations with distributed delay: a topological approach*", within the Summer Semester of the International Meetings on Differential Equations and Their Applications (IMDETA), online via Zoom, organized by the Institute of Mathematics, Faculty of Technical Physics, Information Technology and Applied Mathematics, Lodz University of Technology, Poland
- 12/03/2024 - Educational seminar (interdisciplinary seminar of PLS) entitled "*Modelli matematici: Guida per politici e decision makers, sfida alla libertà dell'uomo*", Liceo Scientifico "Sansi-Leonardi-Volta" in Spoleto (online for other high schools)
- 22/03/2023 - Scientific seminar entitled "*A topological approach to some differential problems arising from applied science models*", within the period as visiting professor at the Department of Mathematics and Computer Science of the University of Calabria
- 16/12/2022 - Scientific seminar entitled "*A unified approach to the study of some equations arising from models of applied sciences*", within the *Seminari* of the Department of Mathematics and Informatics of the University of Florence, Florence

Institutional teaching activity

- Complex Analysis, Second cycle degree course in Mathematics (co-teaching), 2023/24
- Mathematical Analysis Ist, Degree in Physics, 2022/23-today
- Mathematical Analysis IInd, Degree in Computer Science and Electronic Engineering, 2000/01-2021/22
- Mathematical Analysis - mod.I, Degree in Informatics, 2018/19-today
- Mathematics 1, Degree in Chemistry, 2018/19
- Mathematics 2, Degree in Chemistry, 2023/24
- Mathematics 2, Degree in Mechanical Engineering, 2000/01-2011/12
- Mathematics and Statistics, Degree in Biological Sciences, 2014/15

Other teaching activity

- Introductory courses for the engineering degrees, 2013/14, 2015/16-2022/23
- Co-teacher of "*Didattica della Matematica per Ingegneria*" for "*Tutorato di Ingegneria*", Department of Engineering, University of Perugia, project INGEGNERIA.POT , 2019/20
- Collaborator for the didactics of the courses "*Analisi Matematica I*" and "*Metodi Matematici per l'Ingegneria*", Degree in Electronic Engineering and Mechanical Engineering, Faculty of Engineering, University of Perugia, 1996/97
- Supply teacher of Mathematics and Physics at some High Schools, 1993/94-1996/97
- Temporary Professor of "*Analisi Matematica I*" and "*Analisi Matematica II*", Corso di Diploma Universitario in Ingegneria Aerospaziale, Faculty of Engineering, University of Perugia, 1992/93

Other professional activities and informations

- Departmental manager of the *Licei Matematici* project and, consequently, contact person for the *Licei Matematici* network for Umbria since 28/09/23
- Commissioner in a competition for a position of Researcher (RTDB) at the University of Palermo, 08/11/2022-

25/01/2023

Commissioner in a competition for a position of Researcher (RTDB) at the University of Florence, 26/09/2019-28/01/2020

Commissioner in a competition for a position of Researcher (RTDB) at the Polytechnical University of Ancona, 9/11-12/12/2018

Beneficiary of funding FFABR (Fondo per il Finanziamento delle Attività Base di Ricerca): Ricercatori - year 2017

Referee for international scientific projects

Member of REPRISE (register of scientific experts established at the Italian Ministry of University and Research) for the section: Basic research, 2018/03/21-today

Member of the register of auditors of MIUR, years 2013, 2014

Referee for international journals

Reviewer for Mathematical Reviews and Zentralblatt für Mathematik

Member of the European Mathematical Society (EMS)

Member of the Istituto Nazionale di Alta Matematica (INdAM), Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni (GNAMPA), sez. 1. Equazioni Differenziali e Sistemi Dinamici

Member of the Unione Matematica Italiana (UMI), of the UMI group "Teoria dell'Approssimazione e Applicazioni (TAA)", and of the UMI group "Licei Matematici".

Perugia, July 03, 2024

Publications (last 5 years)

Cardinali, T.; Matucci, S.; Rubbioni, P.; Controllability of nonlinear integral equations of Chandrasekhar type, *J. Fixed Point Theory Appl.* 24:58 (2022), DOI :10.1007/s11784-022-00974-5.

Precup, R.; Rubbioni, P.; Stationary solutions of Fokker-Planck equations with nonlinear reaction terms in bounded domains, *Potential Anal.* 57 (2022), no. 2, 181–199, DOI: 10.1007/s11118-021-09911-6

Rubbioni, P.; Solvability for a Class of Integro-Differential Inclusions Subject to Impulses on the Half-Line, *Mathematics* 2022, 10(2), 224, DOI: 10.3390/math10020224

Rubbioni, P.; Asymptotic stability of solutions for some classes of impulsive differential equations with distributed delay, *Nonlinear Anal. Real World Appl.* 61 (2021), 103324, DOI: 10.1016/j.nonrwa.2021.103324

Cardinali, T.; Rubbioni, P.; Hereditary Evolution Processes Under Impulsive Effects. *Mediterr. J. Math.* 18, 91 (2021), DOI: 10.1007/s00009-021-01730-8

Cardinali, T.; Rubbioni, P.; Existence theorems for generalized nonlinear quadratic integral equations via a new fixed point result, *Discr. Cont. Dyn. Sys. - Series S*, 13, No. 7, 1947-1955 (2020), DOI: 10.3934/dcdss.2020152

Benedetti, I.; Cardinali, T.; Gabor, G.; Rubbioni, P.; Lyapunov pairs in semilinear differential problems with state-dependent impulses, *Set-Valued Var. Anal.* 27, No. 2, 585-604 (2019), DOI: 10.1007/s11228-018-0490-7

Cardinali, T.; Rubbioni, P.; The controllability of an impulsive integro-differential process with nonlocal feedback controls, *Appl. Math. Comput.* 347, 29-39 (2019), DOI: 10.1016/j.amc.2018.10.083

Interdisciplinary publications:

De Socio, G.V.; Rubbioni, P.; Botta, D.; Cenci, E.; Belati, A.; Paggi, R.; Pasticci, M.B.; Mencacci, A.; Measurement and prediction of antimicrobial resistance in bloodstream infections by ESKAPE pathogens and *Escherichia coli*, *Journal of Global Antimicrobial Resistance*, 19, 154-160 (2019), DOI: 10.1016/j.jgar.2019.05.013