Teresa Isernia
Curriculum Vitae

Personal Information

Citizenship:	Italian
Languages:	Italian (native language), English (spoken and written)
Current position:	Research Fellow
Affiliation:	DIISM - Dipartimento di Ingegneria Industriale e Scienze Matematiche, Università Politecnica delle Marche, via Brecce Bianche 12, 60131 Ancona.
e-mail:	t.isernia@univpm.it, isernia@dipmat.univpm.it
web page:	http://teresaisernia.altervista.org https://math-diism.univpm.it/isernia/
Research Groups:	Member of the GNAMPA Research Group (Italian Group for Mathematical Analysis, Probability and their Applications)

Education

July 2005:	Scientific High School Diploma, Liceo Scientifico "E. Medi", Cicciano (Napoli).
24 June 2009:	Bachelor's degree in Mathematics, Università degli Studi di Napoli "Federico II", Final grade: 104/110; Thesis title: *Proprietà dei sistemi dinamici bidimensionali e loro applicazioni*, Supervisor: Prof. Maurizio Gentile.
29 March 2012:	Master's degree in Mathematics, Università degli Studi di Napoli "Federico II", Final grade: 110/110; Thesis title: *Il Teorema di regolarità di De Giorgi* Supervisor: Prof. Nicola Fusco.
16 May 2016:	Ph.D. in Mathematical Analysis, Università degli Studi di Napoli "Federico II", Thesis title: *Regularity results for asymptotic problems*,

Advisers: Prof. Chiara Leone and Anna Verde,
Committee: Prof. Luigi Serena (Università degli Studi di Firenze),
            Prof. Giovanni Cupini (Università di Bologna),
            Prof. Alessio Russo (Università degli Studi della Campania),
Final grade: Ottimo,
http://www.fedoa.unina.it/id/eprint/10921

Positions

01/09/17 - 31/08/18	Research Fellow in Mathematical Analysis at Università Politecnica delle Marche, Ancona (Italy), Project title: *Existence and regularity results for local and nonlocal problems*, Supervisor: Prof. Cristina Marcelli.
01/11/18 - 31/10/19	Research Fellow in Mathematical Analysis at Università Politecnica delle Marche, Ancona (Italy), Project title: *Reaction-Diffusion problems involving the fractional Laplacian*, Supervisor: Prof. Cristina Marcelli.

Grants and Fellowship

March 2014:	GNAMPA Project *Disuguaglianze isoperimetriche e mappe a distorsione interna finita*, P.I. dott. Fernando Farroni.
May 2015:	DMA Unina Project *Problemi Evolutivi e Applicazioni*, P.I. Prof. Carlo Mantegazza.
March 2016:	GNAMPA Project *Regolarità per operatori degeneri con crescite generali*, P.I. Prof. Chiara Leone.
March 2017:	GNAMPA Project *Teoria e modelli per problemi non locali*, P.I. Prof. Luigi D'Onofrio.
July 2017:	Research fellowship in Mathematical Analysis at Università Politecnica delle Marche (Ancona).
October 2018:	Research fellowship in Mathematical Analysis at Università Politecnica delle Marche (Ancona).

Refereed Journal Publications

1. T. Isernia, *Bmo regularity for asymptotic parabolic systems with linear growth*, Differential Integral Equations **28** (2015), no. 11-12, 1173–1196.

2. T. Isernia, C. Leone & A. Verde, *Partial regularity results for asymptotic quasiconvex functionals with general growth*, Ann. Acad. Sci. Fenn. Math. **41** (2016), 817–844.

3. V. Ambrosio & T. Isernia, *A multiplicity result for a fractional Kirchhoff equation in $\mathbb{R}^N$ with a general nonlinearity*, Commun. Contemp. Math. **20** (2018), no. 5, 1750054, 17 pp.

4. T. Isernia, *Positive solution for nonhomogeneous sublinear fractional equations in $\mathbb{R}^N$*, Complex Var. Elliptic Equ. **63** (2018), no. 5, 689–714.

5. V. Ambrosio & T. Isernia, *Concentration phenomena for a fractional Schrödinger-Kirchhoff type equation*, Math. Methods Appl. Sci. **41** (2018), no. 2, 615–645.

6. V. Ambrosio & T. Isernia, *Sign-changing solutions for a class of Schrödinger equations with vanishing potentials*, Rend. Lincei Mat. Appl. **29** (2018), 127–152.

7. T. Isernia, *L^∞-regularity for a wide class of parabolic systems with general growth*, Proc. Amer. Math. Soc. **146** (2018), no. 11, 4741–4753.

8. T. Isernia, *Nonhomogeneous sublinear fractional Schrödinger equations*, Two nonlinear days in Urbino 2017. Electron. J. Diff. Eqns., Conf. 25 (2018), pp. 149–165.

9. V. Ambrosio & T. Isernia, *On a fractional p&q Laplacian problem with critical Sobolev-Hardy exponents*, Mediterr. J. Math. **15** (2018), no. 6, 15:219.

10. V. Ambrosio & T. Isernia, *Multiplicity and concentration results for some nonlinear Schrödinger equations with the fractional p-Laplacian*, Discrete Contin. Dyn. Syst. **38** (2018), no.11, 5835–5881;

11. V. Ambrosio, T. Isernia & G. Siciliano, *On a fractional p&q Laplacian problem with critical growth*, Minimax Theory Appl. **4** (2019), no.1, 1–9.

12. V. Ambrosio, G. Figueiredo, T. Isernia & G. Molica Bisci, *Sign-changing solutions for a class of zero mass nonlocal Schrödinger equations*, Adv. Nonlinear Stud. **19** (2019), no. 1, 113–132.

13. V. Ambrosio & T. Isernia, *On the multiplicity and concentration for p-fractional Schrödinger equations*, Appl. Math. Lett. **95** (2019), 13–22.

14. C.O. Alves, V. Ambrosio & T. Isernia, *Existence, multiplicity and concentration for a class of fractional p&q Laplacian problems in $\mathbb{R}^N$*, Comm. Pura App. Anal. **18** (2019), no. 4, 2009–2045.

15. V. Ambrosio, A. Fiscella & T. Isernia, *Infinitely many solutions for fractional Kirchhoff-Sobolev-Hardy critical problems*, Electron. J. Qual. Theory Differ. Equ. 2019, No. 25, 1–13.

Preprints

1. V. Ambrosio, G.M. Figueiredo & T. Isernia, *Existence and concentration of positive solutions for p-fractional Schrödinger equations.*

2. V. Ambrosio & T. Isernia, *On a class of Kirchhoff problems via local mountain pass.*

3. T. Isernia, *On a nonhomogeneous sublinear-superlinear fractional equation in $\mathbb{R}^N$.*

Scientific Communications

September 2015:   Conference in Siena: *XX Congresso UMI*.

February 2016:   School and Workshop in Napoli:*PDEs and Applications*.

May 2016:   Conference in Gaeta: *9th European Conference on Elliptic and Parabolic Problems*.

July 2016:   14th Workshop in Barcellona: *Workshop on interactions between dynamical systems and partial differential equations (JISD2016)*.

March 2017:   Conference in Milano: *Topics in nonlinear analysis and applications*.

May 2017:   Conference in Gaeta: *International Conference on Elliptic and Parabolic Problems*.

July 2017:   Conference in Urbino: *Two nonlinear days in Urbino 2017*.

September 2017:   Conference in Messina: *4th Conference on Recent Trends in Nonlinear Phenomena*.

September 2018:   Conference in Caserta: *Nonlinear Analysis and PDEs* (poster session).

September 2018:   Conference in Wroclaw: *Joint meeting of the Italian Mathematical Union, the Italian Society of Industrial and Applied Mathematics, the Polish Mathematical Society*.

May 2019:   Conference in Gaeta: *International conference on elliptic and parabolic problems*.

Conferences organized

20-24 May 2019   Minisymposium: *Variational Problems and Nonlinear PDEs* at the International conference on elliptic and parabolic problems in Gaeta.

10-11 September 2019   International Workshop on *Non-autonomous Dynamical Systems and Applications*, Ancona.

Schools and Workshop attended

July 2012:   Summer School in Cortona: *Trends in nonlinear elliptic and parabolic equations*; Prof. S. Terracini, Prof. J.L. Vazquez.

July 2013:   Summer School in Cortona: *Non local equation of elliptic type*; Prof. E. Valdinoci E., Prof. I. Peral.

September 2013:   ERC School in Naples: *Geometric Functional Inequalities and Shape Optimization*.

November 2013:   Workshop in Naples: *New Trends in Calculus of Variations and Partial Differential Equations*.

November 2013:   Conference in Accademia Nazionale dei Lincei: *Nonlinear problems with singular data*.

February 2014:	Workshop in Pisa: *Partial Differential Equations and Applications.*
June 2014:	Workshop in Zurich: *Recent advances in non-local and non-linear analysis:theory and applications.*
July-August 2014:	Summer School in Cortona: *Regularity Techniques and Geometrical Aspects in Nonlinear PDE*; Prof. A. Farina, Prof. O. Savin.
September 2014:	Workshop in Naples: *Topics in Elliptic and Parabolic PDEs.*
December 2014:	Course in Madrid: *Nonlocal problems in analysis and geometry*; Prof. E. Valdinoci.
December 2014:	Conference in Venezia: *Two-Days Meeting in Honor of Ambrosetti.*
February 2015:	Conference in Levico Terme: *XXV Convegno Nazionale di Calcolo delle Variazioni.*
June 2015:	School in Catania: *Secondo Corso Intensivo di Calcolo delle Variazioni*; Prof. A. Farina A., Prof E. Valdinoci.
October 2015:	Workshop in Lyon: *Workshop Analysis in Lyon.*
January 2016:	Conference in Levico Terme: *XXVI Convegno Nazionale di Calcolo delle Variazioni.*
September 2016:	Workshop in Pisa: *A Mathematical Tribute to Ennio De Giorgi.*
January 2017:	Conference in Perugia: *James Serrin: from His legacy to the new frontiers.*
February 2017:	Conference in Levico Terme: *XXVII Convegno Nazionale di Calcolo delle Variazioni.*
February 2018:	Conference in Pisa: *Variational Methods in Analysis, Geometry and Physics.*

Teaching Activity

Academic year 2013-2014:	Collaboration to the course *Analisi Matematica 1*, Prof. A. Verde. Collaboration to the course *Matematica 1*, Prof. M. Tricarico.
Academic year 2014-2015:	Collaboration to the course *Matematica 1*, Prof. C. Sbordone. Collaboration to the course *Analisi Matematica 1*, Prof. A. Verde. Collaboration to the course *Analisi Matematica 2*, Prof. C. Leone.
Academic year 2015-2016:	Collaboration to the course *Matematica 1*, Prof. C. Sbordone. Collaboration to the course *Analisi Matematica 1*, Prof. A. Verde. Collaboration to the course *Analisi Matematica 2*, Prof. C. Mantegazza. Substitute Teaching from 16/04/2016 to 08/06/2016 at Liceo Scientifico "E. Medi" Cicciano (Na) (A049).
Academic year 2016-2017:	Lecturer of *Analisi Matematica 1*, 72 hours, undergraduate course for Computer Engineering with specialism in automation, Università degli Studi di Napoli "Federico II".

	Teaching from 26/09/2016 to 31/05/2017 for the project *Pi Greco Cambridge* at Liceo Classico "J. Sannazaro" Napoli (Na).
Academic year 2017-2018:	Teaching Assistant of *Analisi Matematica 1*, 20 hours, Prof. L. Demeio, undergraduate course for Computer Engineering with specialism in automation (A/L), Università Politecnica delle Marche.
	Teaching Assistant of *Analisi Matematica 1*, 20 hours, Prof. P. Montecchiari, undergraduate course for Computer Engineering with specialism in automation (M/Z), Università Politecnica delle Marche.
	Teaching Assistant of *Analisi Matematica 1*, 20 hours, Prof. A. Calamai, undergraduate course for Civil Engineer, Università Politecnica delle Marche.
	Lecturer of *Analisi Matematica 2*, 72 hours, undergraduate course for Civil Engineer, Università Politecnica delle Marche.
Academic year 2017-2018:	Lecturer of *Analisi Matematica 1*, 72 hours, undergraduate course for Computer Engineering with specialism in automation (A/L), Università Politecnica delle Marche.
	Collaboration to the course *Analisi Matematica 2*, Prof. C. Marcelli.
	Collaboration to the course *Analisi Matematica 2*, Prof. A. Calamai.
	Collaboration to the course *Analisi Matematica 2*, Prof. F. Papalini.

Referee activity

I acted as referee for the following journals: 'Acta Mathematica Scientia', 'Advances in Nonlinear Analysis', 'Communications on Pure and Applied Analysis', 'Complex variables and Elliptic Equations', 'Electronic journal of Differential Equations', 'Journal of Mathematical Physics', 'Nonlinear Analysis', 'Rocky Mountain Mathematics Journal'.

Reviewer

I am a reviewer for Mathematical Reviews.

Other activities

01/12/2015-31/12/2015	Prestazione occasionale per "Attività di supporto alla stesura di reports relativi al progetto di ricerca L.R.5 annualità 2007"-"Regolarità per problemi variazionali asintoticamente convessi e applicazioni"; resp. scientifico: Prof. A. Verde.

Ai sensi del D.Lgs. 196 del 30 Giugno 2003, autorizzo al trattamento dei dati contenuti nel presente curriculum e la sua pubblicazione sul web.

Ancona, 27/04/2019

Teresa Isernia