Martina Magliocca

Curriculum Vitæ

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LaMME
Université d'Évry-Val d'Essonne
23 Bvd de France, 91037 Évry Cedex, France

Contents

Personal data

Family name: Magliocca

First name: Martina

Date & place of birth: 14/09/1989, Frosinone (Italy)

Citizenship: Italian

Email: mmaglioc (at) ens-paris-saclay.fr

URL for website: https://martina-magliocca.perso.math.cnrs.fr/

ORCID ID: https://orcid.org/0000-0002-1188-5348

ResearchGate ID: https://www.researchgate.net/profile/Martina-Magliocca

Education

Doctoral Degree

Institution: University of Rome Tor Vergata, Italy

Major subject: Partial differential equations

Thesis title: *The role of first order superlinear terms in local and global time behaviour of nonlinear parabolic equations*

Defense date: 20/04/2017

Final grade: Excellent cum laude

Supervisor: Professor A. Porretta
Department of Mathematics, University of Rome Tor Vergata, Italy

Master Degree

Institution: *Sapienza* University of Rome, Italy

Major subject: Partial differential equations

Thesis title: *Stime di decadimento per equazioni paraboliche non lineari*

Defense date: 30/10/2013

Final grade: 109/110

Supervisor: Professor A. Dall'Aglio
Department of Mathematics, *Sapienza* University of Rome, Italy

Bachelor Degree

Institution: *Sapienza* University of Rome, Italy

Major subject: Partial differential equations

Thesis title: *Analisi di un Modello di Biodegradazione*

Defense date: 13/10/2011

Final grade: 108/110

Supervisor: Professor E. Montefusco
Department of Mathematics, *Sapienza* University of Rome, Italy

Positions

01/09/2022 – now: *Maîtresse de conférences*
Laboratoire de Mathématiques et Modélisation d'Évry (LaMME), Université d'Évry-Val d'Essonne, Évry Cedex, France

01/04/2020 – 30/06/2022: *Postdoctoral position*
Centre Borelli, École Normale Supérieure Paris-Saclay, Gif-sur-Yvette, France

01/03/2019 – 29/02/2020: *Postdoctoral position*
Department of Mathematics "Guido Gastelnuovo", *Sapienza* University of Rome, Italy

Publications

Preprints

1. Alazard, T., Magliocca, M., & Meunier, N. (2022), Traveling wave solution for a coupled incompressible Darcy's free boundary problem with surface tension.
Submitted, available at arXiv:2205.04365.

2. Magliocca, M. (2022), On a fourth order equation describing single-component film models.
Submitted, available at arXiv:2203.13707.

Peer-reviewed published papers

1. Magliocca, M. & Oliva, F. (2021), On some parabolic equations involving superlinear singular gradient terms. Journal of Evolution Equations, 21, 2547–2590.
Also available at arXiv:2101.05196

2. Magliocca, M. (2021), Regularizing effects and long time decays for quasilinear parabolic equations with p-Laplace operator. Revista de la Real Academia de Ciencias Exactas, Físicas y Naturales. Serie A. Matemáticas 115(2), 1-32.
Also available at arXiv:1712.09246.

3. Latorre, M., Magliocca, M., & de León, S. S. (2020). Regularizing effects concerning elliptic equations with a superlinear gradient term. Revista Matemática Complutense, 1-60. .
Also available at arXiv:1910.02643

4. Leonori, T., & Magliocca, M. (2019). Comparison results for a parabolic Cauchy-Dirichlet problem with superlinear gradient growth. Communications on Pure and

Applied Analysis, 18(6), 2923-2960.
Also available at arXiv:1711.06634.

5. Granero-Belinchòn, R., & Magliocca, M. (2019). Global Existence and Decay to equilibrium for some crystal surface models. Discrete & Continuous Dynamical Systems-A, 39(4), 2101-2131.
Also available at arXiv:1804.09645.

6. Magliocca, M., & Porretta, A. (2019). Local and global time decay for parabolic equations with super linear first order terms. Proceedings of the London Mathematical Society, 118(3), 473-512.
Also available at arXiv:1707.01761.

7. Magliocca, M. (2018). Existence results for a Cauchy-Dirichlet parabolic problem with a repulsive gradient term. Nonlinear Analysis, 166, 102-143.
Also available at arXiv:1703.00834.

Talks & posters

Talks - Invited speaker

12-14/09/2022	A brief introduction on bifurcation theory within some applications in Biology and Fluid Dynamics – University of Cantabria, Santander, Spain
09/09/2022	Some IV order problems arising in Physics – University of Bologna, Italy
16/06/2022	On a fourth order equation describing single-component film models – University of València, Spain
03/05/2022	On parabolic problems with superlinear gradient terms – University of Nancy, France
13/04/2022	Bifurcation results for a coupled incompressible Darcy's free boundary problem with surface tension – Conference "Singflows", University of Bordeaux, France
16/02/2022	The regularizing effect of superlinear terms in Elliptic and Parabolic Equations – PDE's in presence in Rome 2022, *Sapienza* University of Rome, Italy
18/01/2022	Bifurcation results for a coupled incompressible Darcy's free boundary problem with surface tension – Congreso Bienal de la Real Sociedad Matemática Española, Ciudad Real, Spain
03/12/2021	Bifurcation results for a coupled incompressible Darcy's free boundary problem with surface tension – Recent Advances in Analysis, PDEs and Applications, Politecnico di Milano, Italy

26/05/2021	Global existence and decay results for some crystal surface models – University of Cantabria, Santander, Spain
28/01/2020	The regularizing effect of singular superlinear terms in parabolic problems – V Congreso de jóvenes investigadores de la RSME, Castelló, Spain
02/05/2019	The regularizing effect of perturbed superlinear gradient terms in elliptic equations – *Sapienza* University of Rome, Italy
12/09/2017	El papel de términos super lineales de primer orden en el comportamiento local y global en tiempo de ecuaciones parabólicas no lineales – University of València, Spain
05/04/2016	Existence results for a parabolic problem with nonlinear reaction terms of first order – University of Granada, Spain

Talks - Contributed speaker

14/10/2020	An overview on superlinear gradient terms in parabolic equations – Special event for all math postdocs from Paris region 2020 , Département de Mathématiques d'Orsay, France
25/02/2020	A survey on fully nonlinear parabolic problems and viscosity solutions – Young Researchers Seminar in Rome, *Sapienza* University of Rome, Italy
19/11/2019	Global existence and decay to equilibrium for some crystal surface models – Conference of the Euro-Maghreb International Research Network in Mathematics and Applications, Academy of Science, Madrid, Spain
23/05/2019	The regularizing effect of superlinear terms in Elliptic and Parabolic Equations – International Conference on Elliptic and Parabolic Problems, Gaeta, Italy
19/06/2018	Comparison results for a parabolic Cauchy-Dirichlet problem with superlinear gradient growth – Equazioni di evoluzione: risultati recenti e prospettive, University of Salento, Lecce, Italy
06/09/2017	Local and global time decay for parabolic equations with superlinear first order terms – 4° Congreso de jóvenes investigadores, València, Spain
24/05/2016	Existence results for a parabolic problem with nonlinear reaction terms of first order – 9° European Conference on Elliptic and Parabolic Problems, Gaeta, Italy

Talks - Others

20/04/2017	The role of first order superlinear terms in local and global time behaviour of nonlinear parabolic equations – University of Rome Tor Vergata, Italy

Doctoral dissertation

23/06/2016 On a parabolic problem with nonlinear reaction terms of first order – University of Rome Tor Vergata, Italy
Colloquium among the Ph.D. students of the University of Rome Tor Vergata, Italy

Posters in Conferences

17-18/05/2018 The regularizing effect of superlinear gradient terms in nonlinear parabolic equations – Sobolev spaces and partial differential equations, Accademia dei Lincei, Rome, Italy

Teaching experiences

2019-2020

10/2019 – 01/2020 Professor
Calcolo e Biostatistica, Bachelor's Degree in Biological Science, *Sapienza* University of Rome, Italy

2018-2019

09/2018 – 12/2018 Teaching Assistant
Matematica Generale, Bachelor's Degree in Economics and Finance, University of Rome Tor Vergata, Italy

09/2018 – 09/2018 Professor
Introductory course, University of Rome 3, Italy

2017-2018

10/2017 – 01/2018 Teaching Assistant
Analisi Matematica 1, Bachelor's Degree in Engineering, University of Rome Tor Vergata, Italy

09/2017 – 12/2017 Teaching Assistant
Matematica Generale, Bachelor's Degree in Economics and Finance, University of Rome Tor Vergata, Italy

2016-2017

10/2016 – 01/2017 Teaching Assistant
Analisi Matematica 1, Bachelor's Degree in Computer Science, University of Rome Tor Vergata, Italy

Organization of events

Co-organizer Mostly Maximum Principle, Cortona, Italy (20/05-03/06/2022)

Organizer Some free boundary problems in physics and biology, online course held by Professor Rafael Granero-Belinchón, (19-28/07/2021)

Co-organizer Colloquia between the Ph.D students of the three Universities in Rome, Italy (2014–2015)

Miscellanea

Abroad experiences

13-27/09/15 University of Granada – Department of Mathematics, Granada, Spain

02-17/04/16 University of Granada – Department of Mathematics, Granada, Spain

03-13/09/17 University of Valencia – Department of Mathematics, València, Spain

31/10-08/11/17 University Claude Bernard Lyon 1 – Institute Camille Jordan, Lyon, France

10/05-12/07/21 University of Cantabria – Santander, Spain

Memberships of Scientific Societies

02/2022 – now Member
Análisis Matemático Aplicado y Ecuaciones Diferenciales (AMAED), Spain.

03/2019 – 02/2020 Member
Istituto Nazionale di Alta Matematica (INDAM), Rome, Italy

03/2019 – 03/2020 Member
Research Network "Problemi differenziali per operatori fully nonlinear fortemente degeneri", *Sapienza* University of Rome, University of Milan, University of Salerno

11/2013 – now Member
Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni (GNAMPA), Italy

Grants

○ FMJH program "Junior Scientific Visibility" – Outgoing mobility

○ FMJH program "Junior Scientific Visibility" – Scientific animations

Languages

Italian Mother-tongue   **French** Advanced

English Advanced   **LIS** Basic

Spanish DELE certification C1 level (19/05/2022)

Programming

HTML5 Self-taught, intermediate skills   **LaTeX** Self-taught, advanced skills

JavaScript Self-taught, basic skills