

Curriculum Vitae

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Positions

- from 11/2020 **Associate professor**, *Department of Mathematics and Physics, University of Campania "Luigi Vanvitelli"*, Caserta, Italy
- from 06/2006 **Ricercatore (Assistant Professor)**, *Department of Mathematics and Physics, University of Campania "Luigi Vanvitelli"*, Caserta, Italy
- 08/2004–05/2005 **Post-Doc**, *Georgia Institute of Technology*, Atlanta, USA
School of Mathematics, Prof. Wilfrid Gangbo
- 09/2002–06/2004 **Assistant**, *École Polytechnique Fédérale*, Lausanne, Switzerland
Chaire d'Analyse Mathématique et Applications, Prof. Bernard Dacorogna

Education and Academics

- 07/05/2021 **Abilitazione Scientifica Nazionale - Fascia I**, Settore Concorsuale 01/A3
Analisi Matematica, Probabilità e Statistica Matematica, Bando D.D. 2175/2018
- 05/03/2004 **Ph.D.**, *University of Naples "Federico II"*, Napoli, Italy
Thesis : Implicit Partial Differential Equation: Different Approaching Methods
Supervisor: Prof. Bernard Dacorogna (EPFL, Switzerland)
Tutor : Prof. Angelo Alvino (Univ. of Naples, Italy)
- 14/01/02–13/05/02 **Visiting Student**, *Carnegie Mellon University*, Pittsburgh, USA
Center for Nonlinear Analysis
Supervisor : Prof. Irene Fonseca
- 22/06/1999 **Laurea in Matematica (Master of Sciences in Mathematics)**, *Second University of Naples*, Caserta

Visiting Positions

- 02/2010–08/2010 **Visiting Professor**, *Hokkaido University*, Sapporo, Japan
Department of Mathematics

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02/2011–03/2011	Visiting Professor, Osaka University , Osaka, Japan School of Engineering Science, Department of System Innovation, Division of Mathematical Science
03/2012–04/2012	Visiting Professor, Osaka University , Osaka, Japan School of Engineering Science, Department of System Innovation, Division of Mathematical Science
09/2012–02/2013	Visiting Professor, Osaka University , Osaka, Japan School of Engineering Science, Department of System Innovation, Division of Mathematical Science
17/12/14–16/01/15	Visiting Professor, Osaka University , Osaka, Giappone School of Engineering Science, Department of System Innovation, Division of Mathematical Science
01/02/17–28/02/17	Visiting Professor, Universität Mannheim , Germany Lehrstuhl für Mathematik IV

Grants and Awards

June 11-29, 2019	ERASMUS+ Teaching mobility Scholarships Lehrstuhl für Mathematik IV, Università di Mannheim, Germany
July 18–27, 2016	ERASMUS+ Teaching mobility Scholarships Department of Mathematics, University of Evora
Sept 02–08, 2015	ERASMUS+ Teaching mobility Scholarships Laboratoire de Mathématiques Appliquées du Havre, Le Havre University
2015	GNAMPA 2015, Research Project , Un approccio variazionale all'analisi di modelli competitivi non lineari Principal Investigator
2010–2014	FP7 Marie Curie project , MC-IRSES-2009-247486 "MaNEqui", Mathematical studies on critical non-equilibrium phenomena via mean field theories and theories of nonlinear partial differential equations funded by the European Commission, local coordinator
Sept 21–28, 2014	ERASMUS+ Teaching mobility Scholarships Laboratoire de Mathématiques Appliquées du Havre, Le Havre University

Publications

- [1] **Homogenization of micromagnetics large bodies**, G. Pisante, ESAIM, Control Optim. Calc. Var., 10:295–314, 2004
- [2] **Sufficient conditions for the existence of viscosity solutions for non-convex Hamiltonians**, G. Pisante, SIAM J. Math. Anal., 36(1):186–203, 2004
- [3] **A general existence theorem for differential inclusions in the vector valued case**, B. Dacorogna and G. Pisante, Port. Math. (N.S.), 62(4):421–436, 2005
- [4] **On non quasiconvex problems of the calculus of variations**, B. Dacorogna, G. Pisante, and A.M. Ribeiro, Discrete Contin. Dyn. Syst., 13(4):961–983, 2005

- [5] **The semigeostrophic equations discretized in reference and dual variables**, *M. Cullen, W. Gangbo and G. Pisante*, Arch. Ration. Mech. Anal., 185(2):341–363, 2007
- [6] **Regularity results for non smooth parabolic problems**, *G. Pisante and A. Verde*, Adv. Differ. Equ., 13(3-4):367–398, 2008
- [7] **Partial regularity and singular set of solutions to second order parabolic systems**, *C. Leone, G. Pisante and A. Verde*, J. Math. Anal. Appl., 341(2):931–952, 2008
- [8] **Higher integrability results for non smooth parabolic systems: The subquadratic case**, *C. Leone, G. Pisante, and A. Verde*, Discrete Contin. Dyn. Syst., Ser. B, 11(1):177–190, 2009
- [9] **Existence of solutions for some quasiaffine PDEs**, *F. Giannetti and G. Pisante*, Z. Anal. Anwend., 28(1):47–56, 2009
- [10] **On a 1-capacitary type problem in the plane**, *M. Focardi, M.S. Gelli and G. Pisante*, Commun. Pure Appl. Anal., 9(5):1319–1333, 2010
- [11] **The Gibbs-Thomson relation for non homogeneous anisotropic phase transitions**, *M. Cicalese, Y. Nagase and G. Pisante*, Adv. Calc. Var., 3(3):321–344, 2010
- [12] **A selection criterion of solutions to a system of eikonal equations**, *G. Croce and G. Pisante*, Adv. Calc. Var., 4:309–338, 2011
- [13] **An isoperimetric inequality for a nonlinear eigenvalue problem**, *G. Croce, A. Henrot and G. Pisante*, Annales de l’Institut Henri Poincaré (C) Non Linear Analysis, 29(1):21 – 34, 2012
Corrigendum to "An isoperimetric inequality for a nonlinear eigenvalue problem", *G. Croce, A. Henrot and G. Pisante*, Annales de l’Institut Henri Poincaré (C) Non Linear Analysis, Volume 32, Issue 2, March–April 2015, Pages 485–487
- [14] **On a Bonnesen type inequality involving the spherical deviation**, *M.S. Gelli, N. Fusco and G. Pisante*, Journal de Mathématiques Pure et Appliquées, 98(6):616–632, 2012
- [15] **A quantitative second order minimality criterion for cavities in elastic bodies**, *G.M. Capriani, V. Julin and G. Pisante*, SIAM J. Math. Anal., 45(3):1952–1991, 2013
- [16] **On representation of boundary integrals involving the mean curvature for mean-convex domains**, *Y. Giga and G. Pisante*, in Geometric Partial Differential Equations, Publications of the Scuola Normale Superiore, Vol. 15, CRM Series, 171–187 2013
- [17] **Stability of Polya-Szegö inequality for log-concave functions**, *M. Barchiesi, G.M. Capriani, N. Fusco and G. Pisante*, Journal Of Functional Analysis, 267:2264–2297, 2014
- [18] **Minimality via second variation for microphase separation of diblock copolymer melts**, *V. Julin and G. Pisante*, Journal Fur Die Reine Und Angewandte Mathematik, DOI: 10.1515/crelle-2014-0117, January 2015

- [19] **On the finite time blow-up for filtration problems with nonlinear reaction**, *K. Fellner, E. Latos and G. Pisante*, Applied Mathematics Letters, Volume 42, April 2015, Pages 47–52
- [20] **Sobolev and Lipschitz regularity for local minimizers of widely degenerate anisotropic functionals**, *L. Brasco, C. Leone, G. Pisante, A. Verde*, Nonlinear Analysis: Theory, Methods & Applications, Volume 153, April 2017, Pages 169-199
- [21] **Sign-changing two-peak solutions for an elliptic free boundary problem related to confined plasmas**, *G. Pisante and T. Ricciardi*, Advances in Nonlinear Analysis, , Published Online, 28/09/2016 (2016), no. 7
DOI: <https://doi.org/10.1515/anona-2016-0029>
- [22] **Variational methods for the selection of solutions to an implicit system of PDEs**, *G. Croce and G. Pisante*, Calculus of Variations and Partial Differential Equations, (2017) 56: 92
- [23] **\mathcal{D} -solutions to the system of vectorial Calculus of Variations in L^∞ via the Baire Category method for the singular values**, *G. Croce, N. Katzourakis and G. Pisante*, Discrete and Continuous Dynamical Systems, (2017)37(12)
- [24] **A weighted anisotropic Sobolev type inequality and its applications to Hardy inequalities**, *G. Di Blasio, G. Pisante and G. Psaradakis*, Mathematische Annalen, (2021) 379, pp 1343-1362
- [25] **A revers isoperimetric inequality for $(\alpha - \beta)$ -convex bodies**, *Gisella Croce, Zakaria Fattah and Giovanni Pisante*, ESAIM. COCV, (2022) 28
- [26] **A design tool for core-back timing in foam injection molding**, *Taki, Kentaro; Menale, Marco; Pisante, Giovanni; Di Maio, Ernesto*, Journal of Applied Polymer Science, (2022)
- [27] **The optimal Leray-Trudinger inequality**, *G. Di Blasio, G. Pisante and G. Psaradakis*, accepted for publication in Indiana University Mathematics Journal, (2023)

Teaching Experience

- 2020–2023 **Calculus 2 for engineers**, *C.d.L. Ingegneria Aerospaziale, Meccanica, energetica / C.d.L. Ingegneria Elettronica e Informatica*, Università della Campania "L. Vanvitelli"
- 2021–2023 **Functional Analysis**, *Master Course in Mathematics*, Università della Campania "L. Vanvitelli"
- 2019–2022 **Introduction to PDEs and Calculus of Variations**, *Ph.D. Course*, University of Campania "L.Vanvitelli", Italy
- 2019–2020 **Distribution theory and PDEs**, *Master Course in Mathematics*, Università della Campania "L. Vanvitelli"
- 2019–2020 **Complex Analysis**, *Master Course in Mathematics*, Università della Campania "L. Vanvitelli"

- 2018–2019 **Advanced Analysis-Functional Analysis**, *Master Course in Mathematics*, Università della Campania "L. Vanvitelli"
- 2018–2019 **Calculus 2**, *C.d.L. in Ingegneria Civile/Edile/Ambientale*, Università della Campania "L. Vanvitelli"
- 12/2016 **Introduction to PDEs and Calculus of Variations**, *Ph.D. Course*, University of Campania "L.Vanvitelli", Italy
- 12/2014 **Quantitative Isoperimetric Type Inequalities and Applications**, *Special Lectures for Ph.D.*, Osaka university, Japan
- 2012–2017 **Advanced Analysis**, *Master course in Mathematics*, Second Univ. of Naples, Italy
- 2010–2012 **Mathematical Analysis II**, *Faculty of Sciences*, Second Univ. of Naples, Italy
- 2006–2010 **Mathematical Analysis III**, *Faculty of Sciences*, Second Univ. of Naples, Italy
- 2006–2009 **T.A. - Mathematical Analysis II**, *Faculty of Sciences*, Second Univ. of Naples, Italy
- 2005–2007 **Ordinary Differential Equations**, *Faculty of Sciences*, Second Univ. of Naples, Italy
- 2004–2005 **Calculus III**, *School of Mathematics*, Georgia Institute of Technology, USA
- 2002–2004 **T.A. - Analysis III & IV**, *Microtechnique & Génie civil*, EPFL, Switzerland
- 2002–2004 **T.A. - Elliptic PDE**, *Dep. Mathematics*, EPFL, Switzerland
- 2000–2001 **T.A. - Analysis for Biology**, *Dep. Mathematics*, Univ. of Naples "Federico II", Italy

Languages

Italian	native	
english	fluent	<i>speaking, listening, reading and writing</i>
french	fluent	<i>speaking, listening, and reading (intermediate writing)</i>