



### Academic Positions

- 2001–present **Associate Professor (MAT/05)**, University of Perugia  
2003 **Visiting Associate Professor**, University of Tennessee, Knoxville (USA)  
1992–01 **Researcher (A02A)**, University of Perugia

### Research Areas

Evolution partial differential equations modelling physical phenomena; dynamic and acoustic boundary conditions; well-posedness and ill-posedness, both local and global; blow-up phenomena and asymptotic behaviour.

### Education

- 1990–1992 **PhD in Mathematics**, Scuola Normale Superiore, Pisa, (not completed due to appointment as University Researcher)  
1985–1989 **Laurea in Mathematics**, University of Perugia, 110/110 cum laude, Advisor: Domenico Candeloro; Thesis: Invariant measures for expansive transformations  
1980–1985 **Scientific High School Diploma**, Liceo Scientifico “G. Alessi”, Perugia, 60/60

### Scientific Recognitions

- 2018 **National Scientific Qualification as Full Professor**, Field MAT/05 – Mathematical Analysis  
2013 **National Scientific Qualification as Full Professor**, Field MAT/05 – Mathematical Analysis  
2001 **Winner of the competition for Associate Professor**, University of Modena  
2001 **CNR Short Mission Grant**, School of Mathematics, University of Minnesota, USA  
1998 **CNR Short Mission Grant**, Institute for Mathematics and its Applications, University of Minnesota, USA, (not used due to bereavement)  
1997 **CNR Short Mission Grant**, Institute for Mathematics and its Applications, University of Minnesota, USA  
1992 **Winner of the competition for University Researcher**, University of Perugia  
1990 **Winner of the competition for PhD Position**, Scuola Normale Superiore, Pisa  
1989 **CNR Scholarship for Young Researchers**, National Research Council of Italy

### Research Impact

- G. Scholar** Publications 45; Citations 1449; H-Index 16; i10-Index 21  
**Math. Rev.** Id 326765; Total Publications 40; Total Citations 824 in 552 publications; Unique Citing Authors 558  
**WOS** ID B-2287-2013; Publications 31; Citing Articles 614; Citing Articles without self-citations 591; Times Cited 825; Times Cited Without self-citations 750; Average citations per item 26.61; H-Index 12  
**Scopus** ID 6602377016; Publications 32; Times Cited 895; Times Cited Without self-citations 822.

### Research Visits in Foreign Universities

- 2023 **Mathematisches Institut**, Albert-Ludwigs-Universität, Freiburg, Germany  
2008 **Departamento de Matemáticas**, Universidad Autónoma de Madrid, Spain  
2006 **Departamento de Matemáticas**, Universidad Autónoma de Madrid, Spain  
2004 **Departamento de Matemáticas**, Universidad Autónoma de Madrid, Spain  
2003 **Departamento de Matemáticas**, Universidad Autónoma de Madrid, Spain  
2003 **Department of Mathematics**, University of Tennessee, Knoxville, USA  
2002 **Departamento de Matemáticas**, Universidad Autónoma de Madrid, Spain

- 2001 **Department of Mathematical Sciences**, University of Wisconsin–Milwaukee, USA
- 2001 **School of Mathematics**, University of Minnesota, USA
- 1999 **School of Mathematics**, University of Minnesota, USA
- 1999 **Bulgarian Academy of Sciences**, Sofia, Bulgaria
- 1997 **Institute for Mathematics and its Applications**, University of Minnesota, USA

## Main Invited Conferences

- 2024 **AIMS – Hyperbolic PDEs**, New York University Abu Dhabi, United Arab Emirates
- 2024 **AIMS – Evolutionary Equation Systems**, New York University Abu Dhabi, United Arab Emirates
- 2023 **Geometric Aspects of Evolution and Control**, FernUniversität in Hagen, Germany
- 2023 **Mathematisches Institut – Applied Mathematics Division, Albert-Ludwigs-Universität Freiburg**, Freiburg, Germany
- 2021 **Forschungsseminars Analysis**, FernUniversität in Hagen, Hagen, Germany
- 2023 **Analysis and PDEs – 65th birthday of V. Rădulescu**, University of Insubria, Varese, Italy
- 2017 **Departamento de Matemáticas, Universidad Carlos III de Madrid**, Madrid, Spain
- 2014 **Neuvièmes Journées EDP**, Université de Lille, France
- 2014 **AIMS – Nonlinear PDE Systems**, Universidad Complutense de Madrid, Spain
- 2014 **AIMS – Nonlinear Evolution Equations**, Universidad Complutense de Madrid, Spain
- 2010 **AIMS – Nonlinear Evolutionary PDEs**, Technische Universität Dresden, Germany
- 2008 **Jornada de Ecuaciones en Derivadas Parciales**, Universidad Autónoma de Madrid, Spain
- 2007 **UMI–DMV Joint International Meeting**, University of Perugia, Italy
- 2006 **AIMS – Nonlinear Elliptic and Parabolic Problems**, Université de Poitiers, France
- 2006 **AIMS – Semigroups and Evolution Equations**, Université de Poitiers, France
- 2006 **Euro-Japanese Workshop on Blow-up**, Universidad Complutense de Madrid (El Escorial), Spain
- 2005 **Equadiff 11 – Qualitative properties of solutions to PDEs**, Comenius University, Bratislava, Slovakia
- 2004 **Nonlinear Elliptic and Parabolic Problems: A Special Tribute to the Work of Herbert Amann**, Zurich, Switzerland
- 2002 **Departamento de Matemáticas, Universidad Autónoma de Madrid**, Madrid, Spain
- 1999 **Mini-meeting on Nonlinear Differential Equations**, University of Minnesota, USA
- 1999 **Bulgarian Academy of Sciences**, Sofia, Bulgaria
- 1998 **Delft Meeting on Functional Analysis and Partial Differential Equations**, Delft, The Netherlands
- 1997 **International Conference on Differential Equations and Dynamical Systems**, University of Waterloo, Canada

## Organization of Scientific Conferences

- 2024 **Two Nonlinear Days**, Perugia
- 2022 **Recent and New Perspectives in Nonlinear Analysis on the Occasion of the Retirement of Patrizia Pucci**, Urbino
- 2012 **Workshop on Nonlinear Partial Differential Equations on the Occasion of the 60th Birthday of Patrizia Pucci**, Perugia
- 2008 **International Workshop on Partial Differential Equations for the 80th Birthday of James Serrin**, Perugia
- 2000 **Nonlinear Analysis**, Perugia

## Main Research Projects

### Coordination

- 2023–2026 *Advanced Theoretical Aspects in PDEs and Their Applications*, MUR – PRIN 2022, Perugia Unit.
- 2010 *Evolution Problems and Dynamical Boundary Conditions*, GNAMPA.

### Participation

- 2014–2017 *Variational and perturbative aspects in nonlinear differential problems*, PRIN 2012.

- 2011–2013 Variational Methods and Nonlinear PDEs, PRIN 2009.
- 2007–2009 Quasilinear Elliptic Problems, PRIN 2006.
- 2004–2006 Quasilinear Elliptic Problems, PRIN 2004.
- 2000–2002 Quasilinear elliptic problems, PRIN 2000.
- 1998–2001 Uniqueness and symmetry for quasilinear elliptic equations, PRIN 1998.

## Selected Papers

1. D. Mugnolo and E. Vitillaro. The wave equation with acoustic boundary conditions on non-locally reacting surfaces. *Mem. Amer. Math. Soc.*, 303(1526):vi+102, 2024.
2. E. Vitillaro. Three evolution problems modelling the interaction between acoustic waves and non-locally reacting surfaces. *J. Evol. Equ.*, 24(41):1–51, 2024.
3. E. Vitillaro. On the wave equation with hyperbolic dynamical boundary conditions, interior and boundary damping and supercritical sources. *J. Differential Equations*, 265(10):4873–4941, 2018.
4. E. Vitillaro. On the wave equation with hyperbolic dynamical boundary conditions, interior and boundary damping and source. *Arch. Ration. Mech. Anal.*, 223(3):1183–1237, 2017.
5. J. L. Vázquez and E. Vitillaro. Heat equation with dynamical boundary conditions of reactive–diffusive type. *J. Differential Equations*, 250(4):2143–2161, 2011.
6. J. L. Vázquez and E. Vitillaro. Heat equation with dynamical boundary conditions of reactive type. *Comm. Partial Differential Equations*, 33(4–6):561–612, 2008.
7. E. Vitillaro. On the Laplace equation with non-linear dynamical boundary conditions. *Proc. London Math. Soc.*, 93(2):418–446, 2006.
8. E. Vitillaro. Global existence for the wave equation with nonlinear boundary damping and source terms. *J. Differential Equations*, 186(1):259–298, 2002.
9. E. Vitillaro. Global nonexistence theorems for a class of evolution equations with dissipation and application. *Arch. Ration. Mech. Anal.*, 149:155–182, 1999.
10. A. Ambrosetti, K. Tanaka, and E. Vitillaro. Periodic solutions with prescribed energy for some keplerian  $N$ -body problems. *Ann. Inst. H. Poincaré Anal. Non Linéaire*, 11(6):613–632, 1994.

## Editorial Activity

- 2025–present **Advances in Nonlinear Analysis**, *Editorial Board Member*, De Gruyter
- 2018–present **Annals of the University of Craiova, Mathematics and Computer Sciences Series**, *Editorial Board Member*
- 2000–present **Referee**, for dozens of international journals, including: Advances in Differential Equations; Advanced Nonlinear Studies; Asymptotic Analysis; Calculus of Variations and PDE; Communications in PDE; Comptes Rendus Mathématique; Differential and Integral Equations; Journal de Mathématiques Pures et Appliquées; Journal of Differential Equations; Journal of Functional Analysis; Journal of Mathematical Analysis and Applications; Mathematical Models and Methods in Applied Sciences; Mathematische Nachrichten; NoDEA; Nonlinear Analysis; Proceedings RSE–A; SIAM J. Math. Analysis; SIAM J. Control and Optimization; Transactions AMS; ZAMP
- 1997–2018 **Reviewer**, *Mathematical Reviews (MathSciNet)*

## Teaching Activity – University of Perugia

### Courses Taught

- 2024–25 **Applied Functional Analysis (in English)**, *Master's Degree in Mathematics*
- 2022–24 **Functional Analysis**, *Master's Degree in Mathematics*
- 2017–18 **Mathematical Methods for Economics (in English)**, *Master's Degree in Mathematics*
- 2016–22 **Applied Functional Analysis**, *Master's Degree in Mathematics*
- 2011–13 **Elements of Mathematics**, *Bachelor's Degree in Civil Protection*
- 2007–25 **Mathematical Analysis II**, *Bachelor's Degree in Physics*
- 2004–05 **Mathematical Analysis B**, *Bachelor's Degree in Physics*
- 2003–16 **Mathematical Analysis VI**, *Master's Degree in Mathematics*
- 2002–07 **Mathematical Methods for Economics**, *Master's Degrees in Mathematics and Applied Mathematics*
- 2001–07 **Mathematical Analysis C**, *Bachelor's Degree in Physics*
- 2001–02 **Mathematical Analysis I and II**, *Degree in Chemistry*
- 2000–01 **Advanced Analysis**, *Degree in Mathematics*

- 1999–2001 **Foundations of Mathematics II**, *Degree in Chemistry*
- 1996–99 **Foundations of Mathematics**, *Degree in Natural Sciences*
- 1995–96 **Mathematical Analysis II**, *Diploma in Computer Science*  
[Exercise Sessions and Tutoring](#)
- 1992–97 **Mathematical Analysis I and II**, *Degrees in Mathematics and Physics*, alternate years  
[Thesis Supervision](#)
- 1994– **Supervisor of 12 Master's Theses**, and 5 Bachelor's Theses, in Mathematics  
[Examination Committees](#)
- 2001–22 **Permanent Member of Master's Degree Examination Committees in Mathematics**
- 1992–present **Permanent Member of Examination Committees for Mathematical Analysis I–II–III–IV–V–VI (also with Arabic numbering), Functional Analysis, Applied Functional Analysis, and Applied Functional Analysis (in English) for the Mathematics Degree Programmes**

## Teaching Activity Abroad – University of Tennessee, Knoxville (USA)

- 2002–03 **Calculus I (in English)**, *Department of Mathematics*, two sections

## Academic Service – University of Perugia

- 2019–present **Institutional Research and VQR Committee**, *Department of Mathematics and Computer Science*, Member
- 2017–2019 **Joint Teaching Committee**, *Department of Mathematics and Computer Science*, Coordinator
- 2016–2017 **Joint Teaching Committee**, *Department of Mathematics and Computer Science*, Member

## Appendix

### Participation in Other Research Projects

- 2023 Partial differential equations of mixed type or depending on vector fields, GNAMPA.
- 2017 Nonlinear differential equations, GNAMPA.
- 2004–2006 International CNR/MTA Italy–Hungary Project.
- 2003 Nonlinear differential equations, GNAMPA.
- 2002–2004 Quasilinear Elliptic Problems, PRIN 2002.
- 2002 Nonlinear elliptic and parabolic differential equations, GNAMPA.
- 1999–2002 Nonlinear Analysis, University Research Project.
- 1999 Semilinear elliptic eigenvalue problems, DAAD Vigoni.
- 1998 Models and Methods for Mathematics and Engineering, CNR.
- 1998 Semilinear elliptic eigenvalue problems, DAAD Vigoni.
- 1998 Nonlinear Analysis, University Research Project.
- 1997 Models and Methods for Mathematics and Engineering, CNR.
- 1997 Nonlinear Analysis and Systems of Differential Equations, MURST.
- 1996 Nonlinear Analysis and Systems of Differential Equations, MURST.
- 1995 Nonlinear Analysis and Systems of Differential Equations, MURST.

### Other Invited Lectures at International Conferences

- 2024 **AMS-UMI International Joint Meeting**, *PDEs Applications to Nonlinear Phenomena*, Palermo
- 2024 **International Conference on Elliptic and Parabolic Problems**, *Advanced theoretical aspects in PDEs and their applications*, Gaeta
- 2019 **BiUrb – Recent Advances in Variational Methods**, University of Urbino “Carlo Bo”
- 2017 **Two-day Meeting on PDEs**, University of Perugia
- 2015 **New Advances in PDEs**, University of Parma
- 2011 **Evolution Equations and Operator Semigroups**, University of Bari “Aldo Moro”
- 2011 **Nonlinear Partial Differential Equations**, Venice
- 2010 **PDEs, Semigroup Theory and Inverse Problems**, University of Bologna “Alma Mater Studiorum”
- 2005 **Variational Methods and Nonlinear Differential Equations**, Sapienza University of Rome
- 2003 **Nonlinear PDEs and Geometrical Problems**, University of Trieste (Grado)

- 2002 **Stationary and Evolution Problems**, University of Trieste (Grado)
- 2002 **Symposium on Partial Differential Equations**, University of Perugia
- 2000 **Workshop on Nonlinear Evolution Problems**, University of L'Aquila
- 1999 **Workshop Blow-up for and Global Existence of Solutions for Parabolic and Hyperbolic Problems**, University of Trieste
- 1999 **Meeting on Ordinary Differential Equations and Applications**, University of Bressanone
- 1999 **Evolution Equations and Applications**, Scuola Normale Superiore, Cortona
- 1996 **Seventh International Colloquium on Differential Equations**, University of Plovdiv "Paisii Hilendarski", Bulgaria
- 1994 **School and Workshop on Variational and Local Methods in the Study of Hamiltonian Systems**, ICTP, Trieste

#### Other Invited Lectures at National Conferences

- 2021 **Workshop on PDEs and Applications**, Perugia
- 2020 **Workshop on Nonlinear PDEs and Applications on the occasion of the retirement of Professor Maria Cesarina Salvatori**, Perugia
- 2018 **Two Nonlinear Days in Perugia on the occasion of Patrizia Pucci's 65th birthday**, Perugia
- 2017 **XVII Italian Meeting on Hyperbolic Equations**, Pavia
- 2006 **IV Annual Conference of the Department of Mathematics and Computer Science**, Perugia
- 2004 **Iperpisa 2004 – XI National Meeting on Hyperbolic Equations**, Pisa
- 2003 **XVII UMI Congress**, Milan
- 2000 **Nonlinear Analysis**, Perugia
- 2000 **VIII National Meeting on Hyperbolic Equations**, Brescia
- 1999 **SISSA Days of Nonlinear Analysis**, S.I.S.S.A., Trieste
- 1999 **XVI UMI Congress**, Naples
- 1997 **V National Meeting on Hyperbolic Equations**, L'Aquila
- 1995 **XV UMI Congress, Nonlinear Analysis**, Padua
- 1994 **Hamiltonian Systems, Partial Differential Equations, Fluid Dynamics, Diffusion Processes**, L'Aquila
- 1993 **National Project on Differential Equations Conference**, Florence

#### Other Invited Lectures at Italian Universities

- 2007 **Department of Mathematics, University of Turin**, Turin
- 1996 **Department of Mathematics, University of Parma**, Parma

#### Selected Participation in Scientific Conferences

- 2019 **Variational Methods with Applications to Mathematical Physics and Geometry**, Venice
- 2018 **Variational Methods in Analysis, Geometry and Physics**, Scuola Normale Superiore, Pisa
- 2017 **Nonlinear Diffusion and Free Boundary Problems – 70th Anniversary of J. L. Vázquez**, UAM Madrid, Spain
- 2014 **Two-Days Meeting in Honor of Antonio Ambrosetti**, Venice
- 2004 **Fifth European Conference on Elliptic and Parabolic Problems**, Gaeta
- 2001 **Linear and Nonlinear Hyperbolic Equations**, Grado
- 1998 **First National Conference – Current Problems in Nonlinear Analysis**, Acicastello (Catania)
- 1997 **Conference in Memory of Ennio De Giorgi**, Scuola Normale Superiore, Pisa
- 1996 **Workshop on Differential Equations and Calculus of Variations**, Department of Mathematics, Pisa
- 1996 **Recent Trends in Elliptic Equations and Related Topics**, Santander, Spain
- 1993 **Second Meeting on Nonlinear Analysis – Workshop on Hamiltonian Systems**, Scuola Normale Superiore, Pisa
- 1992 **Conference in Honor of James B. Serrin**, Ferrara
- 1992 **Second International Conference on Partial Differential Equations**, Como



## Complete List of Publications

- [1] E. Vitillaro. Acoustic waves interacting with non-locally reacting surfaces in a Lagrangian framework. *Math. Nachr.*, 298(12):3855–3892, 2025.
- [2] E. Vitillaro. On the eigenvalue problem for a bulk/surface elliptic system. *Commun. Math. Anal. Appl.*, 4(3):307–335, 2025.
- [3] D. Mugnolo and E. Vitillaro. The wave equation with acoustic boundary conditions on non-locally reacting surfaces. *Mem. Amer. Math. Soc.*, 303(1526):vi+102, 2024.
- [4] E. Vitillaro. Three evolution problems modelling the interaction between acoustic waves and non-locally reacting surfaces. *J. Evol. Equ.*, 24(41):1–51, 2024.
- [5] N. Cangiotti, M. Caponi, A. Maione, and E. Vitillaro. Schrödinger–Maxwell equations driven by mixed local–nonlocal operators. *Fract. Calc. Appl. Anal.*, 27:677–705, 2024.
- [6] E. Vitillaro. Nontrivial solutions for the Laplace equation with a nonlinear Goldstein–Wentzell boundary condition. *Commun. Anal. Mech.*, 15(4):811–830, 2023.
- [7] N. Cangiotti, M. Caponi, A. Maione, and E. Vitillaro. Klein–Gordon–Maxwell equations driven by mixed local–nonlocal operators. *Milan J. Math.*, 91:375–403, 2023.
- [8] A. Barbieri and E. Vitillaro. The damped wave equation with acoustic boundary conditions and non-locally reacting surfaces. *Semigroup Forum*, 105(3):646–679, 2022.
- [9] E. Vitillaro. Blow-up for the wave equation with hyperbolic dynamical boundary conditions, interior and boundary nonlinear damping and sources. *Discrete Contin. Dyn. Syst. Ser. S*, 14(12):4575–4608, 2021.
- [10] P. Pucci and E. Vitillaro. Approximation by regular functions in Sobolev spaces arising from doubly elliptic problems. *Boll. Unione Mat. Ital.*, 13(4):487–494, 2020.
- [11] E. Vitillaro. On the wave equation with hyperbolic dynamical boundary conditions, interior and boundary damping and supercritical sources. *J. Differential Equations*, 265(10):4873–4941, 2018.
- [12] E. Vitillaro. On the wave equation with hyperbolic dynamical boundary conditions, interior and boundary damping and source. *Arch. Ration. Mech. Anal.*, 223(3):1183–1237, 2017.
- [13] A. Fiscella and E. Vitillaro. Blow-up for the wave equation with nonlinear source and boundary damping terms. *Proc. Roy. Soc. Edinburgh Sect. A*, 145(4):759–778, 2015.
- [14] E. Vitillaro. Wave Operators – Part II. In *Selected Papers of James Serrin*, pages 283–285. Birkhäuser, Basel, 2014.
- [15] E. Vitillaro. Strong solutions for the wave equation with a kinetic boundary condition. In *Recent trends in nonlinear partial differential equations. I. Evolution problems*, volume 594 of *Contemp. Math.*, pages 295–307. Amer. Math. Soc., Providence, RI, 2013.
- [16] A. Fiscella and E. Vitillaro. Local Hadamard well-posedness and blow-up for reaction–diffusion equations with non-linear dynamical boundary conditions. *Discrete Contin. Dyn. Syst.*, 33(11–12):5015–5047, 2013.
- [17] J. L. Vázquez and E. Vitillaro. Heat equation with dynamical boundary conditions of reactive–diffusive type. *J. Differential Equations*, 250(4):2143–2161, 2011.
- [18] J. L. Vázquez and E. Vitillaro. On the Laplace equation with dynamical boundary conditions of reactive–diffusive type. *J. Math. Anal. Appl.*, 354(2):674–688, 2009.
- [19] J. L. Vázquez and E. Vitillaro. Wave equation with second-order non-standard dynamical boundary conditions. *Math. Models Methods Appl. Sci.*, 18(12):2019–2054, 2008.
- [20] J. L. Vázquez and E. Vitillaro. Heat equation with dynamical boundary conditions of reactive type. *Comm. Partial Differential Equations*, 33(4–6):561–612, 2008.
- [21] J. L. Vázquez and E. Vitillaro. Heat equation with dynamical boundary conditions of locally reactive type. *Semigroup Forum*, 74(1):1–40, 2007.

- [22] E. Vitillaro. On the Laplace equation with non-linear dynamical boundary conditions. *Proc. London Math. Soc.*, 93(2):418–446, 2006.
- [23] G. Todorova and E. Vitillaro. Blow-up for nonlinear dissipative wave equations in  $\mathbb{R}^n$ . *J. Math. Anal. Appl.*, 303(1):242–257, 2005.
- [24] E. Vitillaro. Global existence for the heat equation with nonlinear dynamical boundary condition. *Proc. Roy. Soc. Edinburgh Sect. A*, 135:1–33, 2005.
- [25] J. Serrin, G. Todorova, and E. Vitillaro. Existence for a nonlinear wave equation with damping and source terms. *Differential Integral Equations*, 16(1):13–50, 2003.
- [26] E. Vitillaro. Global existence for the wave equation with nonlinear boundary damping and source terms. *J. Differential Equations*, 186(1):259–298, 2002.
- [27] E. Vitillaro. A potential well theory for the wave equation with nonlinear source and boundary damping terms. *Glasg. Math. J.*, 44(3):375–395, 2002.
- [28] E. Vitillaro. Some new results on global nonexistence and blow-up for evolution problems with positive initial energy. *Rend. Istit. Mat. Univ. Trieste*, 31(suppl. 2):245–275, 2000.
- [29] E. Vitillaro. Blow-up for the porous media equation with source term and positive initial energy. *J. Math. Anal. Appl.*, 247:183–197, 2000.
- [30] E. Vitillaro. Global nonexistence theorems for a class of evolution equations with dissipation and application. *Arch. Ration. Mech. Anal.*, 149:155–182, 1999.
- [31] M. C. Salvatori and E. Vitillaro. Decay properties for some lagrangian systems with dissipative terms and applications. *Period. Math. Hungar.*, 38(1–2):63–85, 1999.
- [32] M. C. Salvatori and E. Vitillaro. Decay and stability for some nonlinear quasi-variational systems. In *Atti Sem. Mat. Fis. Univ. Modena*, volume 46, pages 937–949, 1998.
- [33] M. C. Bossi and E. Vitillaro. Asymptotic stability for damped strongly non-autonomous systems with applications to holonomic mechanical systems and nonlinear networks. *NoDEA Nonlinear Differential Equations Appl.*, 5:25–48, 1998.
- [34] A. Boccuto and E. Vitillaro. Asymptotic stability for abstract evolution equations and applications to partial differential systems. *Rend. Circ. Mat. Palermo*, 47:25–48, 1998.
- [35] M. C. Salvatori and E. Vitillaro. Decay for the solutions of nonlinear abstract damped evolution equations with applications to partial and ordinary differential systems. *Differential Integral Equations*, 11:223–262, 1998.
- [36] E. Vitillaro. Decay for some second order nonlinear systems. In D. Bainov, editor, *Proceedings of the Seventh International Colloquium on Differential Equations*, pages 401–412, The Netherlands, 1997. VSP.
- [37] M. C. Salvatori and E. Vitillaro. Asymptotic behavior near the singularity of a second order nonlinear differential equation. *Asymptotic Analysis*, 12:55–76, 1996.
- [38] E. Vitillaro. Non-collision periodic solutions of fixed energy for a symmetric  $N$ -body type problem. In *Variational and local methods in the study of Hamiltonian systems*, pages 202–211. World Scientific, River Edge, NJ, 1995.
- [39] E. Vitillaro. Closed orbits of prescribed mean potential energy for a class of  $N$ -body type problems. *Dynam. Systems Appl.*, 4(2):225–235, 1995.
- [40] A. Ambrosetti, K. Tanaka, and E. Vitillaro. Periodic solutions with prescribed energy for some keplerian  $N$ -body problems. *Ann. Inst. H. Poincaré Anal. Non Linéaire*, 11(6):613–632, 1994.
- [41] E. Vitillaro. Periodic solutions for singular conservative systems. *J. Math. Anal. Appl.*, 185(2):403–429, 1994.
- [42] E. Vitillaro. Misure invarianti per trasformazioni  $C^2$  a tratti ed espansive di  $[0, 1]^n$  in sé. *Atti Sem. Mat. Fis. Univ. Modena*, 40(1):215–228, 1992.