
ANDREA GIACOBBE
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Curriculum redacted on 12.19.22 according to Artt. 46 and 47 of D.P.R. 28.12.2000, n. 445

Personal data and titles

Birth date	December 28, 1970
Birth place	Venezia
Citizenship	Italian
Marital statu	Married
Titles	<i>PhD in Mathematics</i> (2000) Università degli Studi di Padova University of Maryland at College Park, USA <i>Master in Mathematics</i> with 110/110 cum laude (1995) Università degli Studi di Padova <i>Scientific diploma</i> (1989) Liceo Scientifico Sperimentale <i>L. Stefanini</i> , Mestre (Ve)

Work positions

03.2016– today	Associate professor, Università degli Studi di Catania, Catania
01.2005– 02.2016	Assistant professor Università degli Studi di Padova, Padova
10.2004–12.2004	Post-doc fellowship, Università degli Studi di Padova, Padova
06.2002–08.2004	Post-doc fellowship, european contract HPRN-CT-2000-0113 <i>MASIE</i> , Utrecht Universiteit, Utrecht, The Netherlands
06.2000–05.2002	Post-doc fellowship, Università degli Studi di Padova, Padova
08.1996–05.2000	Teaching Assistantship (per un semestre scholarship), University of Maryland, College Park, USA (circa 4 anni di permanenza all'estero)
11.1995–10.1999	PhD fellowship, Università degli Studi di Padova, Padova
01.1994–12.1994	CNR fellowship Università degli Studi di Padova, Padova

Pubblicazioni

I authored 38 articles, published in international journals and refereed by one or more referees. Among these articles, 6 are signed by myself alone, the other are signed by 2 up to 4 authors, except one that has 8 authors. My H-index is 11 (Scopus), the total number of citations are 352 (Scopus), the number of coauthors is 23 (Scopus) (see <https://www.scopus.com/authid/detail.uri?authorId=7003592778>).

On refereed journals

- [1] Giacobbe Andrea, A geometric classification of Hamiltonian equilibria by spectral type, *Journal of Geometry and Physics* 183 (2023).
doi: 10.1016/j.geomphys.2022.104707
- [2] Giacobbe Andrea, Mulone Giuseppe, Perrone Carla, Monotonic energy stability for inclined laminar flows, *Mechanics Research Communications* online (2022).
doi: 10.1016/j.mechrescom.2022.103987
- [3] Di Bona Gabriele, Giacobbe Andrea, A simple theoretical model for lags and asymmetries of surface temperature, *Climate* 1-24 (2021).
doi: 10.3390/cli9050078
- [4] Falsaperla Paolo, Giacobbe Andrea, Mulone Giuseppe, Stability of laminar flows in an inclined open channel, *Ricerche di Matematica* 70, 67–79 (2021).
doi: 10.1007/s11587-020-00487-8
- [5] Falsaperla Paolo, Giacobbe Andrea, Mulone Giuseppe, Stability of the Plane Bingham–Poiseuille Flow in an Inclined Channel, *Fluids*, 1-14 (2020).
doi: 10.3390/fluids5030141
- [6] Falsaperla Paolo, Giacobbe Andrea, Mulone Giuseppe, Linear and nonlinear stability of magnetohydrodynamic Couette and Hartmann shear flows, *International Journal of Non-Linear Mechanics* 1-14 (2020).
doi: 10.1016/j.ijnonlinmec.2020.103490
- [7] Giacobbe Andrea, Mulone Giuseppe, Wang Wendi, Modeling eating disorders in young people, *Nonlinear Analysis: Real World Applications* 53 103064 (2020)
doi: 10.1016/j.nonrwa.2019.103064
- [8] Falsaperla Paolo, Giacobbe Andrea Mulone Giuseppe, Inclined convection in a porous Brinkman layer: linear instability and nonlinear stability, *Proceedings of the Royal Society A: Mathematical, Physical and Engineering Sciences* 475 20180614 (2019)
doi: 10.1098/rspa.2018.0614
- [9] Falsaperla Paolo, Giacobbe Andrea, Mulone Giuseppe, Nonlinear stability results for plane Couette and Poiseuille flows, *Journal of Physics E* 100 013113 (2019)
doi: 10.1103/PhysRevE.100.013113
- [10] Buonomo Bruno, Giacobbe Andrea, Mulone Giuseppe, Analysis of an epidemic model with peer-pressure and information-dependent transmission with high-order distributed delay, *Ricerche di Matematica* 68 453-468 (2018)
doi: 10.1007/s11587-018-0419-3
- [11] Giacobbe Andrea, Mulone Giuseppe, Stability of ordered equilibria, *Journal of Mathematical Analysis and Applications* 462 1298-1308 (2018)
doi: 10.1016/j.jmaa.2018.02.040
- [12] Giacobbe Andrea, Mulone Giuseppe, Straughan Brian, Wang Wendi, Modelling drinking with information, *Mathematical Methods in the Applied Sciences* 40 4400-4411 (2017)
doi: 10.1002/mma.4312
- [13] Falsaperla Paolo, Giacobbe Andrea, Mulone Giuseppe, On the hydrodynamic and magnetohydrodynamic stability of an inclined layer heated from below, *Atti Accad. Naz. Lincei Rend. Lincei Mat. Appl.* (2017)
doi: 10.4171/RLM/774

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- [14] Konstantinos Efstathiou, Andrea Giacobbe, Pavao Mardesic, Donimique Sugny, Rotation forms and local Hamiltonian monodromy, *Journal of Mathematical Physics* **58** 022902 (2017).
doi: 10.1063/1.4975215.
- [15] Paolo Falsaperla, Andrea Giacobbe, Sebastiano Lombardo, Giuseppe Mulone, Stability of hydromagnetic laminar flows in an inclined heated layer, *Ricerche Di Matematica* **66** 125–140 (2016).
doi: 10.1007/s11587-016-0290-z
- [16] Paolo Falsaperla, Andrea Giacobbe, Sebastiano Lombardo, Giuseppe Mulone, Laminar hydromagnetic flows in an inclined heated layer, *Atti Della Accademia Peloritana Dei Pericolanti* **94** A5:1–17 (2016).
doi: 10.1478/AAPP.941A5
- [17] Francesco Fassò, Andrea Giacobbe, Luis Garcia Naranjo, Quasi-periodicity in relative quasi-periodic tori, *Nonlinearity* **28** 4281–4301 (2015).
doi: 10.1088/0951-7715/28/11/4281
- [18] Carla Ciarcià, Paolo Falsaperla, Andrea Giacobbe, Giuseppe Mulone, A mathematical model of anorexia and bulimia, *Mathematical Methods in the Applied Sciences* **38** 2937–2952 (2015).
doi: 10.1002/mma.3270
- [19] Andrea Giacobbe, Giuseppe Mulone, Stability in the rotating Bénard problem and its optimal Lyapunov functions, *Acta Applicandae Mathematicae* **132** 307–320 (2014).
doi: 10.1007/s10440-014-9905-0
- [20] Paolo Falsaperla, Andrea Giacobbe, Giuseppe Mulone, Some results in the nonlinear stability for rotating Bénard problem with rigid boundary condition, *Atti della Accademia Peloritana dei Pericolanti* **91** A9:1–10 (2013).
doi: 10.1478/AAPP.91S1A9
- [21] Francesco Fassò, Andrea Giacobbe, Nicola Sansonetto, Linear weakly Noetherian constants of motion are horizontal gauge momenta, *Journal of Geometric Mechanics* **4** 129–136 (2012).
doi: 10.3934/jgm.2012.4.129
- [22] Paolo Falsaperla, Andrea Giacobbe, Giuseppe Mulone, Double diffusion in rotating porous media under general boundary conditions, *International Journal of Heat and Mass Transfer* **55** 2412–2419 (2012).
doi: 10.1016/j.ijheatmasstransfer.2011.12.035
- [23] Paolo Falsaperla, Andrea Giacobbe, Marginal regions for the solute Bénard problem with many types of boundary conditions, *International Journal of Engineering Science* **57** 11–23 (2012).
doi: 10.1016/j.ijengsci.2012.04.001
- [24] Konstantinos Efstathiou, Andrea Giacobbe, The topology associated with cusp singular points, *Nonlinearity* **25** 3409–3422 (2012).
doi: 10.1088/0951-7715/25/12/3409
- [25] Paolo Falsaperla, Andrea Giacobbe, Giuseppe Mulone, Does symmetry of the operator of a dynamical system help stability?, *Acta Applicandae Mathematicae* **122** 239–253 (2012).
doi: 10.1007/s10440-012-9740-0
- [26] Francesco Fassò, Andrea Giacobbe, Nicola Sansonetto, On the number of weakly Noetherian constants of motion of nonholonomic systems, *Journal of Geometric Mechanics* **1** 389–416 (2009).
doi: 10.3934/jgm.2009.1.389
- [27] Andrea Giacobbe, Fractional monodromy: parallel transport of homology cycles, *Differential Geometry and its Applications* **26** 140–150 (2008).
doi: 10.1016/j.difgeo.2007.11.011
- [28] Francesco Fassò, Andrea Giacobbe, Nicola Sansonetto, Gauge conservation laws and the momentum equation in nonholonomic mechanics, *Reports on Mathematical Physics* **62** 345–367 (2008).
doi: 10.1016/S0034-4877(09)00005-6

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- [29] Andrea Giacobbe, Infinitesimally stable and unstable singularities of 2-degrees of freedom completely integrable systems, *Regular and Chaotic Dynamics* **12** 717–731 (2007).
doi: 10.1134/S1560354707060123
- [30] Francesco Fassò, Andrea Giacobbe, Geometry of invariant tori of certain integrable systems with symmetry and an application to a nonholonomic system, *Symmetry, Integrability and Geometry: Methods and Applications* **3** 1–12 (2007).
doi: 10.3842/SIGMA.2007.051
- [31] Andrea Giacobbe, Convexity of multi-valued momentum maps, *Geometriae Dedicata* **111** 1–22 (2005).
doi: 10.1007/s10711-004-1620-y
- [32] Francesco Fassò, Andrea Giacobbe, Nicola Sansonetto, Periodic flows, rank-two Poisson structures, and nonholonomic mechanics, *Regular and Chaotic Dynamics* **10** 267–284 (2005).
doi: 10.1070/RD2005v010n03ABEH000315
- [33] Holger R. Dullin, Andrea Giacobbe, Richard H. Cushman, Monodromy in the resonant swing spring, *Physica D: Nonlinear Phenomena* **190** 15–37 (2004).
doi: 10.1016/j.physd.2003.10.004
- [34] Richard H. Cushman, Holger R. Dullin, Andrea Giacobbe, Darryl D. Holm, Mark Joyeux, Peter Lynch, Dimitri A. Sadovskii, Boris I. Zhilinskii, CO₂ molecule as a quantum realization of the 1:1:2 resonant swing-spring with monodromy, *Physical Review Letters* **93** 1–4 (2004).
doi: 10.1103/PhysRevLett.93.024302
- [35] Andrea Giacobbe, Richard H. Cushman, Dimitri A. Sadovskii, Boris I. Zhilinskii, Monodromy of the quantum 1:1:2 resonant swing spring, *Journal of Mathematical Physics* **45** 5076–5100 (2004).
doi: 10.1063/1.1811788
- [36] Andrea Giacobbe, Some remarks on the Gelfand-Cetlin system, *Journal of Physics A: Mathematical and General* **35** 10591–10605 (2002).
doi: 10.1088/0305-4470/35/49/308
- [37] Francesco Fassò, Andrea Giacobbe, Geometric structure of “broadly integrable” Hamiltonian systems, *Journal of Geometry and Physics* **44** 156–170 (2002).
doi: 10.1016/S0393-0440(02)00059-1
- [38] Andrea Giacobbe, Convexity and multivalued Hamiltonians, *Russian Mathematical Surveys* **55** 578–580 (2000).
doi: 10.1070/RM2000v055n03ABEH000300

Seminars, scientific visits, collaborations

I gave seminars in many institutions. In particular at SISSA in Trieste, at Università Federico II in Napoli, at Università di Milano Bicocca, at Utrecht Universiteit (Paesi Bassi), at Rijksuniversiteit Groningen (Paesi Bassi), at Southwest University di Chongqing (Cina), at Universities of Catania and Padova.

I made scientific visits, some of which 1 month long, at: University of Warwick, Coventry (UK), Université du Littoral, Dunkerque e Boulogne-sur-Mer (Francia), University of Surrey, Guildford (UK), Centre Bernoulli, EPFL, Lausanne (Svizzera), University of Manchester, Manchester (UK), Università degli Studi di Bari, Rijksuniversiteit Groningen (Paesi Bassi), Université de Bourgogne, Dijon (Francia), Southwest University, Chongqing (Cina), Xi'an Jiaotong-Liverpool University, Suzhou (Cina).

I did collaborate with: Francesco Fassò, Giuseppe Mulone, Dimitri Sadovskii, Boris Zhilinskii, Holger Dullin, Richard Cushman, Konstantinos Efsthathiou, Pavao Mardesic, and others, from universities in many different parts of the world: Italy, France, The Netherlands, United Kingdom, Cina.

Editorial boards and Refereeing

I have been member of the editorial board of the special issue Symmetry and Control of Discrete and Continuous Systems, in the journal Symmetry.

I have been referee for many journals. To name a few: International Journal of Heat and Mass Transfer, Journal of Mathematical Analysis and Applications, International Journal of Bifurcation and Chaos, Acta Applicanda Mathematica, Journal of Fixed Point Theory and Applications, Mathematical Methods in the Applied Sciences, Proceedings of the Royal Society A, e altre.

Participation and organization of conferences

I made presentations to over 30 international conferences (many WASCOM, CICAM, conferences at Bernoulli Center in Lausanne, at Lorenz Center in Leiden, etc.). At about 10 conferences I was *invited speaker*. I have been member of the organizing committee of the following 6 conferences.

June 2022	WASCOM 2022, Catania, Hotel Nettuno
April 2022	Workshop <i>Evolution in discrete and continuous mechanics: stability, transients, and asymptotics</i> , Bressanone, Bolzano, Casa dello studente dell'Università degli Studi di Padova
July 2018	Sessione "Geometry and Dynamics" al convegno AIMS 2018 Taipei, Taiwan
December 2014	Workshop on <i>current problems in fluid-dynamics and non-equilibrium thermodynamics</i> , Bressanone, Bolzano, Casa dello studente dell'Università degli Studi di Padova
June 2013	WASCOM XVII, Levico, Trento
September 2010	CICAM 5, Catania, Dipartimento di Matematica e Informatica, Università degli Studi di Catania

Participation to financed projects

- Local responsible for Catania of project PRIN 2017YBKNCE (PI prof. Marco Sammartino);
- PI of two "Progetto Giovani Ricercatori" of INdAM and of "Progetto PIACERI" of Università degli Studi di Catania;
- Member of other 12 projects: other 4 PRIN, 8 local projects, one european project (MASIE).

faithfully
Andrea Giacobbe