

CURRICULUM VITAE

Guido Gentile

1 Personal data

- Qualification : Full Professor (Professore ordinario).
- University address : Dipartimento di Matematica e Fisica, Università Roma Tre, Largo San Leonardo Murialdo 1 – 00146 Roma, Italia.
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2 Education, studies and visits

- **June 1991**. Università degli Studi di Roma “La Sapienza”. Master’s degree in Physics. Final mark: 110/110 *cum laude*. Supervisor: Prof. G. Gallavotti. Dissertation: *La funzione beta nei sistemi fermionici unidimensionali* (Beta function in one-dimensional fermion systems), Università di Roma “La Sapienza”, Roma, 1–317 (1991).
- **November 1991 – October 1994**. Università degli Studi di Roma “La Sapienza”. PhD in Physics. Supervisor: Prof. G. Gallavotti. External examiner: Prof. K. Osterwalder. Final examination: 17 November 1995. Dissertation: *Anomalia della superficie di Fermi in una dimensione e analisi delle cancellazioni necessarie per la dimostrazione* (Anomaly of Fermi surface in one dimension and analysis of the cancellations needed in the proof). Università di Roma “La Sapienza”, Roma, 1–234 (1995).
- **November 1994 – May 1995**. Invitation at *Institut des Hautes Études Scientifiques* (IHES), Bures sur Yvette (Paris).
- **June – November 1995**. PostDoc Fellowship (EC program “Stability and Universality in Classical Mechanics” ERBCHRXCT940460), at *Institut des Hautes Études Scientifiques* (IHES), Bures sur Yvette (Paris).
- **December 1995**. First at a CNR competition for 10 fellowships (bando del CNR n. 201.01.121 del 19/9/94). [Renunciation.]
- **February 1996 – January 1997**. PostDoc fellowship (EC program TMR ERBFMBICT950080) at *Institut des Hautes Études Scientifiques* (IHES), Bures sur Yvette (Paris).
- **February 1996**. Visit at *Erwin Schrödinger Institut* (ESI), Vienna.
- **February – March 1996**. First at a MURST competition for a permanent position as researcher in Mathematical Physics, Università Roma Tre, Facoltà di Scienze Matematiche, Fisiche e Naturali (bando del 3/5/94, G.U. 4^a serie speciale n. 35). First examination: 25 February 1996. Second examination: 26 February 1996. Third examination: 8 March 1996. [Communication: 5 June 1996. Started at: 2 November 1996.]

- **October 1996.** Visit at *Mathematics Department*, Rutgers University, New Brunswick (New Jersey, USA).
- **October 1997.** Visit at *Departament de Matemàtica Aplicada i Anàlisi*, Barcelona University.
- **December 1998.** Invitation at *Centre de Physique Théorique*, CNRS, Luminy (Marseille).
- **February – March 1999.** Visit at *Erwin Schrödinger Institut* (ESI), Vienna.
- **May 1999.** Invitation at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **September 1999.** Visit at *Institut des Hautes Études Scientifiques* (IHES), Bures sur Yvette (Paris).
- **February – March 2000.** Qualification at a competition for a permanent position as associated professor in Mathematical Physics Università Roma Tre, Facoltà di Architettura (bando del 19/3/99, G.U. 4^a serie speciale n. 25). First examination: 25 February 2000. Second examination: 26 February 2000. [Data di certificazione regolarità atti: 14/02/2000. Data di delibera di facoltà: 27/03/2000. Started at: 1 November 2001.]
- **May 2000.** Visit at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **May 2000.** Visit at *Dipartimento di Matematica e Informatica*, Università di Udine.
- **February 2001.** Visit at *Erwin Schrödinger Institut* (ESI), Vienna.
- **September 2001.** Scientific meeting at *Dipartimento di Matematica*, Università di Padova.
- **November – December 2002.** Visit at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **November 2003.** Invitation at *Departamento de Física Matemática*, Sao Paulo University.
- **November – December 2003.** Visit at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **June 2004.** Visit at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **January 2005.** Visit at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **June 2005.** Visit at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **January – February 2006.** Visit at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **May 2006.** Invitation at *Department of Mathematics and Statistics*, University of Helsinki.
- **July 2006.** Visit at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **November 2006.** Invitation at *Department of Mathematics*, Imperial College, London.
- **April 2007.** Invitation at *Centro di Ricerca Matematica Ennio De Giorgi*, Pisa.
- **July 2007.** Visit at *Department of Mathematics and Statistics*, Surrey University, Guildford.
- **October – November 2007.** Visit at *Erwin Schrödinger Institut* (ESI), Vienna.
- **January 2008.** Invitation at *Centre de Physique Théorique*, CNRS, Luminy (Marseille).

- **June 2008.** Visit at *Erwin Schrödinger Institut* (ESI), Vienna.
- **July 2008.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **January 2009.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **July 2009.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **January 2010.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **June 2010.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **February 2011.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **September 2011.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **March 2012.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **July 2012.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **January 2013.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **February 2013.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **July 2013.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **December 2013.** National scientific qualification (abilitazione scientifica nazionale), academic discipline 01/04, role full professor - validity: from 3/12/2013 to 3/12/2019 (indicators: number of normalised publications 42, number of normalised citations 27.8, index h-c 8).
- **March 2014.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **July 2014.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **March 2015.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **June 2015.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **January – February 2016.** First at a MURST competition for a permanent position as full professor in Mathematical Physics, Università Roma Tre, Dipartimento di Matematica e Fisica (bando del 4/8/2015, G.U. 4^a serie speciale n. 59). [Data approvazione atti: 7 January 2016. Started at: 1 February 2016.]
- **March 2016.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **February – March 2017.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **June 2017.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **March 2018.** Visit at *Department of Mathematics*, Surrey University, Guildford.
- **October 2018.** Visit at *School of Mathematics*, Georgia Institute of Technology, Atlanta.
- **April 2019.** Visit at *School of Mathematics*, Georgia Institute of Technology, Atlanta.

3 Conferences, schools and seminars

3.1 Talks (upon invitation)

- **March 1992.** Talk at *Dipartimento di Ingegneria*, Università dell'Aquila. Title: *Il principio di Maupertuis* (Maupertuis' principle).
- **May 1993.** Talk at *Dipartimento di Fisica*, Università di Roma "La Sapienza". Title: *Gruppo di rinormalizzazione e sistemi fermionici unidimensionali* (Renormalization group and one-dimensional fermion systems).
- **January 1994.** Talk at *Dipartimento di Matematica*, Università di Roma "Tor Vergata". Title: *Tori baffuti con frequenze e spettro di Lyapunov fissati* (Whiskered tori with fixed frequencies and Lyapunov spectrum).
- **January 1995.** Talk at *Institut des Hautes Études Scientifiques* (IHES), Bures sur Yvette. Title: *A quantum field theory approach to KAM theory*.
- **February 1995.** Talk at *Institut Henri Poincaré* (IHP), Université Paris VI, Paris. Title: *Convergence of the Lindstedt series for KAM tori*.
- **November 1995.** Talk at *Istituto di Ottica*, Università di Firenze. Title: *Leggi di grandi deviazioni per sistemi di Anosov* (Large deviations laws for Anosov systems).
- **November 1995.** Talk at *Dipartimento di Matematica Pura e Applicata*, Università di Padova. Title: *Serie di Lindstedt e teorema KAM* (Lindstedt series and KAM theorem).
- **April 1996.** Talk at *Dipartimento di Matematica*, Università Roma Tre. Title: *Analiticità dei tori invarianti nel parametro perturbativo per una classe di sistemi hamiltoniani quasi integrabili non analitici* (Analyticity of KAM invariant tori in the perturbative parameter for a class of non-analytical quasi-integrable Hamiltonian systems).
- **October 1997.** Talk at *Departament de Matemàtica Aplicada i Anàlisi*, Barcelona University. Title: *Exponentially small splitting for systems with three time scales*.
- **March 1998.** Talk at *Dipartimento di Fisica*, Università di Roma "La Sapienza". Title: *Proprietà d'invarianza di scala vicino alle risonanze per l'applicazione standard* (Scaling properties near resonances for the standard map).
- **December 1998.** Talk at *Centre de Physique Théorique*, CNRS, Luminy (Marseille). Title: *Compensations entre petits diviseurs*.
- **May 1999.** Talk at *Department of Mathematics and Statistics*, Surrey University, Guildford. Title: *The radius of convergence for invariant KAM curves of the standard map*.
- **January 2001.** Talk at *Dipartimento di Fisica*, Università di Roma "La Sapienza". Title: *Sistemi hamiltoniani isocroni e serie di Lindstedt* (Isochronous Hamiltonian systems and Lindstedt series).
- **May 2002.** Talk at *Dipartimento di Matematica*, Università Roma Tre. Title: *Tori invarianti iperbolici e risommazioni di serie divergenti* (Hyperbolic invariant tori and summations of divergent series).
- **May 2003.** Talk at *Dipartimento di Matematica*, Università Roma Tre. Title: *Spettro discreto per sistemi a due livelli* (Pure point spectrum for two-level systems).

- **November 2003.** Talk at *Departamento de Física Matemática*, Universidade de São Paulo. Title: *Periodic solutions for the nonlinear wave equation.*
- **November 2003.** Talk at *Departamento de Física Matemática*, Universidade de São Paulo. Title: *Periodic solutions in PDE systems.*
- **December 2003.** Talk at *Department of Mathematics and Statistics*, Surrey University, Guildford. Title: *Periodic solutions for nonlinear wave equations in the completely resonant case.*
- **March 2004.** Talk at *Dipartimento di Matematica*, Università Roma Tre. Title: *Soluzioni periodiche dell'equazione della corda nonlineare con periodi in un insieme di misura positiva* (Periodic solutions of the nonlinear string equation with periods in a positive measure set).
- **December 2005.** Talk at *Dipartimento di Matematica*, Università Roma Tre. Title: *Attrattori quasiperiodici, serie divergenti e Borel-sommabilità per sistemi dinamici forzati fortemente dissipativi* (Quasi-periodic attractors, divergent series and Borel summability for strongly dissipative forced dynamical systems).
- **May 2006.** Talk at *Department of Mathematics and Statistics*, University of Helsinki. Title: *Quasi-periodic attractors, divergent series and Borel-summability in forced dynamical systems with strong damping.*
- **November 2006.** Talk at *Department of Mathematics*, Imperial College, London. Title: *Renormalization group for lower-dimensional tori under the Bryuno condition.*
- **January 2008.** Talk at *Centre de Physique Théorique*, CNRS, Luminy (Marsiglia). Title: *Self-energy resummation and Borel summability for quasi-periodic motions.*
- **May 2012.** Talk at *Dipartimento di Fisica*, Università di Roma “La Sapienza”. Title: *Moti risonanti in sistemi unidimensionali con forzante quasiperiodica* (Resonant motions in one-dimensional systems with quasiperiodic forcing).
- **March 2014.** Talk at *Dipartimento di Matematica e Fisica*, Università Roma Tre. Title: *Imprevedibilità dei moti in meccanica classica* (Impredictability of motions in classical mechanics).
- **March 2017.** Talk at *Dipartimento di Fisica*, Università di Roma “La Sapienza”. Title: *Periodic and quasi-periodic attractors for the spin-orbit dynamics of Mercury.*
- **October 2018.** Talk at *School of Mathematics*, Georgia Institute of Technology, Atlanta. Title: *Strongly dissipative systems with a quasi-periodic forcing term.*
- **November 2018.** Talk at *Dipartimento di Matematica e Fisica*, Università Roma Tre. Title: *Periodic and quasi-periodic attractors for the spin-orbit dynamics of Mercury.*
- **April 2019.** Talk at *School of Mathematics*, Georgia Institute of Technology, Atlanta. Title: *Periodic and quasi-periodic attractors for the spin-orbit dynamics of Mercury.*

[Talks given within conferences programs are listed below.]

3.2 Conferences upon invitation

- **February 1995.** 1st Meeting on the European Network on Stability and Universality in Classical Mechanics”, Paris, 10–11 February 1995. Talk: *KAM theory and field theory*.
- **February 1996.** “Workshop on Discrete Geometry and Condensed Matter Physics”, Vienna, 4–17 February 1996. Talk: *Chaotic hypothesis and Axiom A systems*.
- **December 1998.** “Symmetry and Perturbation Theory SPT98”, Roma, 16–22 December 1998. Talk: *Diagrammatic techniques in perturbation theory, and applications*.
- **February 1999.** “Workshop on Non Equilibrium Statistical Mechanics”, Vienna, 22–26 February 1999. Talk: *Fluctuation theorem for Anosov flows*.
- **September 1999.** “The determination of homoclinic trajectories in Hamiltonian systems and Arnold’s diffusion”, Bures sur Yvette (France), 6–17 September 1999. Talk: *Bryuno function and the standard map*.
- **September 2000.** “Dynamical systems: classical, quantum, stochastic”, Teulada (Italy), 23–30 September. Talk: *Anderson localization in the Holstein model*.
- **February 2001.** “Workshop on Non Equilibrium Statistical Mechanics - Chaotic Dynamics and Dynamical Systems”, Vienna, 5–16 February 2001. Talk: *Shape of the analyticity domain of the conjugating function for the standard map*.
- **June 2002.** “Renormalization Group”, Oberwolfach, 9–15 June 2002.
- **September 2002.** “Perspectives in Mathematical Physics”, Roma, 4–7 September 2002. Talk: *Renormalization group and field theoretic techniques for KAM problems*.
- **March 2003.** “Frontiers in number theory, physics and geometry”, Les Houches, 9–21 March 2003. Talk: *Bryuno numbers and dynamical systems*.
- **May 2004** “Workshop on Hamiltonian Dynamical Systems”, Montréal, 24–28 May 2004. Talk: *Small amplitude periodic solutions for the nonlinear string equation*.
- **September 2004.** “Dynamical Systems: Classical, Quantum and Stochastic”, Acireale, 12–18 September 2004. Talk: *Elliptic lower-dimensional tori in a degenerate case*.
- **September 2004.** “Nonlinear Dynamics, Ergodic Theory and Renormalization”, Leiden, 21–24 September 2004. Talk: *Degenerate lower-dimensional tori and resummations of divergent series*.
- **May 2005.** “Recent and future developments in Hamiltonian Systems: theory and applications”, Paris, 24–27 May 2005. Talk: *Stability for quasi-periodically perturbed Hill’s equations*.
- **April 2006.** “The rigorous renormalization group”, Oberwolfach, 9–15 April 2006.
- **June 2006.** “AIMS’ Sixth International Conference on Dynamical Systems, Differential Equations and Applications”, Poitiers, 25–28 June 2006. Talk: *Quasi-periodic attractors, divergent series and Borel-summability in forced dynamical systems with strong damping*.
- **July 2006.** “One day meeting: parametric nonlinear oscillations”, Guildford, 7 July 2006. Talk: *Quasi-periodic attractors, divergent series and Borel-summability in forced dynamical systems with strong damping*.

- **August 2006.** “Topics in Mathematical Physics”, Sao Paulo, 1–4 August 2006. Talk: *Bryuno skew-product flows*.
- **April 2007.** “Dynamical Systems and Number Theory”, Pisa, 16 April – 13 July 2007. Talk: *Summation of divergent series in small divisor problems*.
- **June 2008.** “Workshop on Hyperbolic Dynamical Systems with Singularities”, Vienna, 23–28 June 2008. Talk: *Periodic solutions for a class of nonlinear partial differential equations in higher dimension*.
- **December 2008.** “KAM Theory and its applications”, Leiden, 1–5 December 2008. Talk: *Periodic solutions for a class of nonlinear partial differential equations in higher dimension*.
- **April 2009.** “New connections between dynamical systems and Hamiltonian PDEs”, Napoli, 1 April – 6 June 2009. Talk: *Quasi-periodic motions in strongly dissipative forced systems*.
- **September 2010.** “Dissipative PDEs in Bounded and Unbounded Domains and Related Attractors”, Edinburgh, 20–24 September 2010. Talk: *Periodic solutions for nonlinear PDEs in higher dimension*.
- **May 2011.** “Conference on KAM and Cauchy theory for PDEs”, Ravello, 23–27 May 2011. Talk: *Periodic solutions for a class of nonlinear PDEs in higher dimension*.
- **January 2013.** “Non-equilibrium statistical mechanics and the theory of extreme events in Earth science”, Reading, 8–11 January 2013. Talk: *Attractiveness of periodic orbits in parametrically forced systems with time-increasing friction*.
- **September 2014.** “Numbers and Physics”, Madrid, 15–19 September 2014. Talk: *Resonant tori of arbitrary codimension for quasi-periodically forced systems*.
- **February 2015.** “Recent results and open problems in mathematical physics”, L’Aquila, 13 February 2015. Talk: *Resonant tori of arbitrary codimension for quasi-periodically forced systems*.
- **December 2015.** “Localization and reducibility in Hamiltonian PDEs and quantum mechanics”, Milan, 16–18 December 2015. Talk: *Resonant tori of arbitrary codimension for quasi-periodically forced systems*.

3.3 Organization of conferences

- **October – November 2007.** Program “Applications of the Renormalization group” organized by G. Gentile, H. Grosse, G. Huisken, V. Mastropietro, ESI, Vienna, 17 October – 29 November 2007. (Workshop “Renormalization Group Flow and Ricci Flow”, 22 - 26 October; workshop “Renormalization in Dynamical Systems”, 29 October – 3 November; workshop “Renormalization in Quantum Field Theory, Statistical Mechanics and Condensed Matter”, 12 – 17 November).
- **July 2012.** “Mechanics: classical, statistical and quantum (a conference in honor of the 70th birthday of Giovanni Gallavotti)” organized by G. Gentile, A. Giuliani, V. Mastropietro, Università “La Sapienza”, Roma, 2 – 5 July 2012.

3.4 Other conferences and schools

- **July – August 1991.** “X International Congress on Mathematical Physics”, Leipzig, 30 July – 9 August 1991.
- **September 1991.** “XVI scuola estiva di Fisica Matematica”, Ravello (Italy), 9–21 September 1991.
- **May 1993.** “I Convegno di Meccanica Celeste”, L’Aquila (Italy), 24–27 May 1993.
- **February 1994.** “International Congress on Mesoscopic Physics and Fundamental problems in Quantum Mechanics”, Roma, 14–17 February 1994.
- **June 1995.** “NATO Advanced Study Institute on Hamiltonian systems with three or more degrees of freedom”, S’Agaro (Spain), 19–30 June 1995. Poster: *Renormalization and KAM theory*.
- **October 1995.** “Conference on Dynamical Zeta Function”, Luminy (France), 9–13 October 1995.
- **January 1996.** “Workshop on research Program on Non Equilibrium Statistical Mechanics”, Roma, 19–20 January 1996. Talk: *Fluctuation theorem and Anosov flows*.
- **June – July 1996.** “Let’s face chaos through nonlinear dynamics”, 3rd International Summer School Conference, Maribor (Slovenia), 24 June – 5 July 1996. Talk: *Large deviation rule for Anosov systems*.
- **July 1996.** “Conference on quantum coherence in strongly correlated fermion systems”, Pisa (Italy), 22–26 July 1996.
- **October 1996.** “Hyperbolic Dynamics and applications to nonequilibrium statistical mechanics”, Rutgers (USA), 13–14 October 1996.
- **February 1997.** “FPU e dintorni”, Padova, 24–26 July 1997.
- **September 1997.** “KAM techniques in quantum mechanics, adiabatic analysis and Nekhoroshev estimates”, Dijon, 17–19 September 1997.
- **June 1998.** “Dynamical systems and small divisors”, Cetraro (Italy), 13–20 June 1998. Talk: *Scaling properties near resonances for (the semistandard and) the standard map*.
- **June 1998.** “Celestial mechanics, separatrix splitting, diffusion”, Aussois (France), 21–27 June 1998. Talk: *Lower bounds for homoclinic splitting. Some examples. I*.
- **July 1998.** “XXth IUPAP International Conference on Statistical Physics”, Paris, 20–24 July 1998.
- **May 1999.** “Mathematics towards the third millenium”, Roma, 27–29 May 1999.
- **July 1999.** “Theory and Applications of Hamiltonian systems” Cetraro (Italy), 1–10 July 1999. Talk: *Low dimensional tori*.
- **May 2000.** “New Trends in Statistical Mechanics”, Pontignano (Italy), 21–25 May 2000.
- **July 2000.** “Workshop on Dynamical Systems”. Edinburgh, 10–14 July 2000. Talk: *On the analyticity domain of the invariant curves of standard map and generalizations*.
- **July 2000.** “XIII International Congress on Mathematical Physics”, Londra, 17–22 July 2000.

- **September 2000.** “Regular and unstable motions in Hamiltonian systems”, Roma, 6–9 September 2000.
- **November 2000.** “Linee di sviluppo della Fisica Matematica nell’area romana”, Roma, 23–24 November 2000. Talk: *Serie di Lindstedt per perturbazioni di sistemi isocroni* (Lindstedt series for perturbations of isochronous systems).
- **June 2001.** “III Convegno di Meccanica Celeste”, Villa Mondragone - Roma, 18–22 June 2001.
- **February 2002.** “Hamiltonian dynamical systems”, London, 11–15 February 2002. Talk: *On the analyticity of the invariant curves for the standard map.*
- **May 2002.** “Symmetry and Perturbation Theory SPT 2002 (SPT IV)”, Cala Gonone (Italy), 19–26 May 2002. Talk: *Renormalization group and summation of divergent series for hyperbolic invariant tori.*
- **July 2002.** “International Conference on Theoretical Physics” Paris, UNESCO, 22–27 July 2002.
- **September 2002.** “Dynamical systems: classical, quantum, stochastic”, Serra degli Alimini (Italy), 14–19 September 2002.
- **November 2002.** “I primi dieci anni di attività della Facoltà di Scienze M.F.N.”, Roma, 20–22 November 2002. Talk: *Un nuovo approccio ai sistemi dinamici* (A new approach to dynamical systems).
- **June 2003.** “Dinamica in Italia”, Pisa, 25–27 June 2003. Talk: *Quasi-periodic solutions for a generalized Riccati equation.*
- **July – August 2003.** “XIV International Congress on Mathematical Physics”, Lisbona, 28 July – 1 August 2003. Poster: *Quasi-periodic solutions and pure point spectrum for two-level systems.*
- **May 2004.** “FPU 50 years from FPU”, Roma, 7–8 May 2004.
- **May – June 2004.** “Symmetry and Perturbation Theory SPT 2004”, Cala Gonone (Italy), 30 May – 6 June 2004. Talk: *Periodic solutions for zero-mass nonlinear wave equations.*
- **June 2007.** “NATO’s Advanced Study Institute on Hamiltonian Dynamical Systems and applications”, Montréal, 18–29 June 2007.
- **November 2007.** “Renormalization in Quantum Field Theory, Statistical Mechanics and Condensed Matter”, Vienna, 12–16 November 2007. Talk: *Self-energy resummation and Borel summability for quasi-periodic motions.*
- **June 2011.** “Workshop on Instabilities in Hamiltonian Systems”, Toronto, 13–17 June 2011.
- **October 2013.** “Finite- and infinite-dimensional Hamiltonian systems”, Roma, 24–25 Ottobre 2013. Talks: *Some problems in dynamical systems* (Alcuni problemi in sistemi dinamici).

4 Publications

4.1 Published papers and papers accepted for publication

1. G. Gentile, B. Scoppola, *Renormalization group and the ultraviolet problem in the Luttinger liquid*, Comm. Math. Phys. **154** (1993), no. 1, 135–179. [MR1220952 (95a:81177)].
2. G. Gallavotti, G. Gentile, *Majorant series convergence for twistless KAM tori*, Ergodic Theory Dynam. Systems **15** (1995), no. 5, 857–869. [MR1356618 (96h:58152)].
3. G. Gentile, *A proof of existence of whiskered tori with quasi flat homoclinic intersections in a class of almost integrable hamiltonian systems*, Forum Math. **7** (1995), no. 6, 709–753. [MR1359423 (97a:58164b)].
4. G. Gentile, *Whiskered tori with prefixed frequencies and Lyapunov spectrum*, Dynam. Stability of Systems **10** (1995), no. 3, 269–308. [MR1356323 (97a:58164a)].
5. G. Gallavotti, G. Gentile, V. Mastropietro, *Field Theory and KAM tori*, Math. Phys. Electron. J. **1** (1995), Paper 5, 1–13. [MR1359460 (97b:81072)].
6. G. Gentile, V. Mastropietro, *Tree expansion and multiscale analysis for KAM tori*, Nonlinearity **8** (1995), no. 6, 1159–1178. [MR1363405 (97c:58137)].
7. G. Gentile, V. Mastropietro, *KAM theorem revisited*, Phys. D **90** (1996), no. 3, 225–234. [MR1372451 (96k:58194)].
8. G. Gentile, V. Mastropietro, *Methods of analysis of the Lindstedt series for KAM tori and renormalizability in classical mechanics. A review with some applications*, Rev. Math. Phys. **8** (1996), no. 3, 393–444. [MR1388257 (98f:58169)].
9. G. Benfatto, G. Gentile, V. Mastropietro, *Electrons in a lattice with an incommensurate potential*, J. Stat. Phys. **89** (1997), no. 3–4, 655–708. [MR1658711 (99g:82025)].
10. G. Gentile, *Large deviation rule for Anosov flow*, Forum Math. **10** (1998), no. 1, 89–118. [MR1490140 (98i:58180)].
11. F. Bonetto, G. Gallavotti, G. Gentile, V. Mastropietro, *Quasi linear flows on tori: regularity of their linearization*, Comm. Math. Phys. **192** (1998), no. 3, 707–736. [MR1620547 (99e:58148)].
12. F. Bonetto, G. Gallavotti, G. Gentile, V. Mastropietro, *Lindstedt series, ultraviolet divergences and Moser’s theorem*, Ann. Scuola Norm. Sup. Pisa Cl. Sci. (4) **26** (1998), no. 3, 545–593. [MR1635706 (99i:58132)].
13. G. Benfatto, G. Gentile, V. Mastropietro, *Peierls instability for the Holstein model with rational density*, J. Stat. Phys. **92** (1998), no. 5–6, 1071–1113. [MR1657864 (99h:82074)].
14. A. Berretti, G. Gentile, *Scaling properties for the radius of convergence of a Lindstedt series: the standard map*, J. Math. Pures Appl. (9) **78** (1999), no. 2, 159–176. [MR1677673 (2000c:37054)].
15. G. Gallavotti, G. Gentile, V. Mastropietro, *Separatrix splitting for systems with three time scales*, Comm. Math. Phys. **202** (1999), no. 1, 197–236. [MR1686531 (2000c:37086)].
16. G. Gallavotti, G. Gentile, V. Mastropietro, *Melnikov’s approximation dominance. Some examples.*, Rev. Math. Phys. **11** (1999), no. 4, 451–461. [MR1682687 (2001a:37087)].

17. F. Bonetto, G. Gentile, *On a conjecture for the critical behaviour of KAM tori*, Math. Phys. Electron. J. **5** (1999), Paper 4, 1–8. [MR1713650 (2000g:37083)].
18. G. Gallavotti, G. Gentile, V. Mastropietro, *A field theory approach to Lindstedt series for hyperbolic tori in three time scales problems*, J. Math. Phys. **40** (1999), no. 12, 6430–6472. [MR1725867 (2001e:37077)].
19. G. Gallavotti, G. Gentile, V. Mastropietro, *On homoclinic splitting problems*, Phys. D **137** (2000), no. 1–2, 202–204. [MR1738773 (2000m:37122)].
20. G. Gallavotti, G. Gentile, V. Mastropietro, *Hamilton-Jacobi equation, heteroclinic chains and Arnol'd diffusion in three time scales systems*, Nonlinearity **13** (2000), no. 2, 323–340. [MR1745371 (2000m:37121)].
21. F. Bonetto, G. Gentile, V. Mastropietro, *Electric fields on a surface with constant negative curvature*, Ergodic Theory Dynam. Systems **20** (2000), no. 3, 681–696. [MR1764922 (2001b:37036)].
22. A. Berretti, G. Gentile, *Scaling properties for the radius of convergence of Lindstedt series: generalized standard maps*, J. Math. Pures Appl. (9) **79** (2000), no. 7, 691–713. [MR1776500 (2001g:37087)].
23. G. Gentile, V. Mastropietro, *Anderson localization for the Holstein model*, Comm. Math. Phys. **215** (2000), no. 1, 69–103. [MR1800918 (2002m:82011)].
24. A. Berretti, C. Falcolini, G. Gentile, *Shape of analyticity domains of Lindstedt series: the standard map*, Phys. Rev. E **64** (2001), no. 1, 015202(R), 4pp. [MR1860713 (2002h:37118)].
25. A. Berretti, G. Gentile, *Bryuno function and the standard map*, Comm. Math. Phys. **220** (2001), no. 3, 623–656. [MR1843777 (2002j:37053)].
26. A. Berretti, G. Gentile, *Non-universal behaviour of scaling properties for generalized semistandard and standard maps*, Nonlinearity, **14** (2001), no. 5, 1029–1039. [MR1862810 (2002h:37100)].
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33. A. Berretti, G. Gentile, *Periodic and quasi-periodic orbits for the standard map*, Comm. Math. Phys. **231** (2002), no. 1, 135–156. [MR1947694 (2003k:37091)].
34. M. Bartuccelli, G. Gentile, K.V. Georgiou, *KAM theory, Lindstedt series and the stability of the upside-down pendulum*, Discrete Contin. Dyn. Syst. Ser. A. **9** (2003), no. 2, 413–426. [MR1952383 (2003k:37090)].
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36. G. Gentile, *Quasi-periodic solutions for two-level systems*, Comm. Math. Phys. **242** (2003), no. 1–2, 221–250. [MR2018273 (2005a:81272)].
37. A. Berretti, G. Gentile, *Scaling of the critical function for the standard map: some numerical results*, Nonlinearity **17** (2004), no. 2, 649–670. [MR2039064 (2005i:37046)].
38. M. Bartuccelli, J. Deane, G. Gentile, S. Gourley, *Global attraction to the origin in a parametrically-driven nonlinear oscillator*, Appl. Math. Comput. **153** (2004), no. 1, 1–11. [MR2063138 (2005d:34077)].
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41. G. Gentile, V. Mastropietro, *Construction of periodic solutions of the nonlinear wave equation with Dirichlet boundary conditions by the Lindstedt series method*, J. Math. Pures Appl. (9) **83** (2004), no. 8, 1019–1065. [MR2082491 (2007b:35234)].
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43. G. Gentile, G. Gallavotti, *Degenerate elliptic resonances*, Comm. Math. Phys. **257** (2005), no. 2, 319–362. [MR2164602 (2006e:37111)].
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58. F. Bonetto, G. Gallavotti, G. Gentile, *A fluctuation theorem in a random environment*, Ergodic Theory Dynam. Systems **28** (2008), no. 1, 21–47. [MR2380301 (2009k:82054)].
59. M.V. Bartuccelli, A. Berretti, J.H.B. Deane, G. Gentile, S.A. Gourley, *Periodic orbits and scaling laws for a driven damped quartic oscillator*, Nonlinear Analysis. Real World Applications **9** (2008), no. 5, 1966–1988. [MR2441763 (2009g:34144)].
60. G. Gentile, M. Procesi, *Periodic solutions for the Schrödinger equation with nonlocal smoothing nonlinearities in higher dimension*, J. Differential Equations **245** (2008), no. 11, 3253–3326. [MR2460026 (2009g:35304)].
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62. M.V. Bartuccelli, J.H.B. Deane, G. Gentile, *Frequency locking in an injection-locked frequency divider equation*, Proc. R. Soc. Lond. Ser. A Math. Phys. Eng. Sci. **465** (2009), no. 2101, 283–306. [MR2461376 (2010d:94170)].
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64. G. Gentile, *Quasi-periodic motions in dynamical systems. Review of a renormalisation group approach*, J. Math. Phys. **51** (2010), no. 1, 015207, 34 pp. [MR2605840 (2011b:37114)].

65. G. Gentile, *Quasi-periodic motions in strongly dissipative forced systems*, Ergodic Theory Dynam. Systems. **30** (2010), no. 5, 1457–1469. [MR2718902 (2011m:70042)].
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68. G. Gentile, *Construction of quasi-periodic response solutions in forced strongly dissipative systems*, Forum Math. **24** (2012), no. 4, 791–808. [MR2949124].
69. G. Gallavotti, G. Gentile, A. Giuliani, *Resonances within chaos*, Chaos **22** (2012), no. 2, 026108, 6 pp. [MR3388577].
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71. L. Corsi, G. Gentile, *Oscillator synchronisation for arbitrary quasi-periodic forcing*, Comm. Math. Phys. **316** (2012), no. 2, 489–529. [MR2993923].
72. L. Corsi, R. Feola, G. Gentile, *Lower-dimensional invariant tori for perturbations of a class of non-convex Hamiltonian functions*, J. Stat. Phys. **150** (2013), no. 1, 156–180. [MR3018881].
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82. M. Bartuccelli, G. Gentile, J.A. Wright, *Stable dynamics in forced systems with sufficiently high/low driving frequency*, *Chaos* **26** (2016), no. 8, 083108, 7 pp. [MR3534822].
83. L. Corsi, G. Gentile, *Resonant tori of arbitrary codimension for quasi-periodically forced systems*, *Nonlinear Differential Equations Appl.* **24** (2017), no. 1, 24:3. [MR3584590].
84. J.A. Wright, M. Bartuccelli, G. Gentile, *Comparisons between the pendulum with varying length and the pendulum with oscillating support* *J. Math. Anal. Appl.* **449** (2017), no. 2, 1685-1707. [MR3601611].
85. G. Gentile, F. Vaia, *Response solutions for forced systems with large dissipation and arbitrary frequency vector*, *J. Math. Phys.* **58** (2017), no. 2, 022703, 14 pp. [MR3613305].
86. M. Bartuccelli, J. Deane, G. Gentile, *Periodic and quasi-periodic attractors for the spin-orbit evolution of Mercury with a realistic tidal torque*, *Monthly Notices Roy. Astronom. Soc.* **469** (2017), no. 1, 127-150.
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88. J.H.B. Deane, R.D.I.G. Dharmasena, G. Gentile, *Power computation for the triboelectric nanogenerator*, *Nano Energy* **54** (2018), 39-49.
89. G. Gentile, A. Mazzoccoli, F. Vaia, *Forced quasi-periodic oscillations in strongly dissipative systems of any finite dimension*, *Commun. Contemp. Math.* **21** (2019), no. 7, 1850064, 22 pp.
90. M. Bartuccelli, J. Deane, G. Gentile, *Explicit estimates on the torus for the sup-norm and the crest factor of solutions of the Modified Kuramoto-Sivashinky Equation in one and two space dimensions*, *J. Dynamics Differential Equations*, to appear.

4.2 Proceedings

91. G. Gentile, V. Mastropietro, *A possible mechanism for the KAM tori breakdown, Hamiltonian systems with three or more degrees of freedom*, *Proceedings of NATO Adv. Sci. Ins. Ser. C Math. Phys. Sci.* (S'Agaró, Spagna, 19-30 Giugno 1995), 372-376, Ed. C. Simó, Kluwer, Dordrecht, Holland, 1999. [MR1720915].
92. G. Gentile, *Diagrammatic techniques in perturbation theory, and applications*, *Symmetry and Perturbation Theory* (Rome, 16-22 Dicembre 1998), 59-78, Eds. A. Degasperis and G. Gaeta, World Scientific, River Edge, NJ, 1999. [MR1844106 (2002h:37122)].
93. G. Gentile, *Renormalization Group and Summation of Divergent Series for Hyperbolic Invariant Tori*, *SPT 2002: Symmetry and Perturbation Theory* (Cala Gonone, 19-26 Maggio 2002), 82-89, Eds. S. Abenda, G. Gaeta, and S. Walcher, World Scientific, River Edge, NJ, 2003. [MR1976659 (2004c:37143)].
94. G. Gentile, *Un nuovo approccio ai sistemi dinamici, Stato della ricerca e sviluppi futuri. I primi dieci anni di attività della Facoltà di Scienze M.F.N. Roma Tre* (Roma, 20-22 Novembre 2002), 289-298, Aracne Editrice, Roma, 2003.

95. G. Gentile, *Periodic solutions for zero-mass nonlinear wave equations*, *SPT 2004: Symmetry and Perturbation Theory* (Cala Gonone, 19–26 Maggio 2004), 115–123, Eds. G. Gaeta, B. Prinari, S. Rauch-Wojciechowski, and S. Terracini, World Scientific, Hackensack, NJ, 2005. [MR2331213 (2008d:35135)].
96. G. Gentile, *Bryuno numbers and dynamical systems*, in *Frontiers in Number Theory, Physics, and Geometry, Vol. I: On random matrices, zeta functions, and dynamical systems* (Les Houches, 9–21 Marzo 2003), 585–599, Eds. P.E. Cartier, B. Julia, P. Moussa, and P. Vanhove, Springer, Berlin, 2006. [MR2261105 (2008g:37001)].

4.3 Books

97. G. Gallavotti, F. Bonetto, G. Gentile, *Aspects of the ergodic, qualitative and statistical theory of motion*, Springer, Berlin, 2004. [MR2057077 (2005h:37001)].

4.4 Articles for encyclopedias

98. G. Gentile, *Diagrammatic techniques in perturbation theory*, *Encyclopedia of Mathematical Physics*, Vol. 2, 54–60, Eds. J.-P. Francoise, G.L. Naber and T. Sh. Tsun, Elsevier, Oxford, 2006. [MR2238867 (2007k:00005)].
99. G. Gentile, *Stability theory and KAM*, *Encyclopaedia of Mathematical Physics*, Vol. 5, 26–32, Eds. J.-P. Francoise, G.L. Naber and T. Sh. Tsun, Elsevier, Oxford, 2006. [MR2238867 (2007k:00005)].
100. G. Gentile, *Diagrammatic methods in classical perturbation theory*, *Encyclopedia of Complexity and System Science*, Vol. 2, 1932–1948, Ed. R.A. Meyers, Springer, Berlin, 2009; reprinted in *Mathematics of complexity and dynamical systems*, Vol. 1, Springer, New York, 2012. [MR3220666].

4.5 Preprints

5 Teaching

- **1996/1997.**
 - (1) Lectures for the course: Istituzioni Matematiche II (Bachelor’s degree in Architecture).
 - (2) Lectures for the course: Meccanica Razionale (Bachelor’s degree in Mathematics).
 - (3) Lectures for the course: Meccanica Razionale (Bachelor’s degree in Physics).
- **1997/1998.**
 - (1) Lectures for the course: Metodi Matematici e Statistici I modulo (Bachelor’s degree in Mathematics).
 - (2) Lectures for the course: Meccanica Razionale (Bachelor’s degree in Mathematics).
 - (3) Lectures for the course: Meccanica Razionale (Bachelor’s degree in Physics).
- **1998/1999.**

Course: Sistemi Dinamici I modulo (Bachelor’s degree in Mathematics).
- **1999/2000.**

Course: Sistemi Dinamici I modulo (Bachelor’s degree in Mathematics).

- **2000/2001.**
Course: Sistemi Dinamici I modulo (Bachelor's degree in Mathematics).
- **2001/2002.**
 - (1) Course: FM1 - Equazioni differenziali e Meccanica (Bachelor's degree in Mathematics).
 - (2) Course: CAM - Complementi di Analisi Matematica 1 (Bachelor's degree in Mathematics).
- **2002/2003.**
 - (1) Course: FM1 - Equazioni differenziali e Meccanica (Bachelor's degree in Mathematics).
 - (2) Course: FM3 - Meccanica lagrangiana e hamiltoniana (Bachelor's degree in Mathematics).
- **2003/2004.**
 - (1) Course: FM1 - Equazioni differenziali e Meccanica (Bachelor's degree in Mathematics).
 - (2) Course: FM3 - Meccanica lagrangiana e hamiltoniana (Bachelor's degree in Mathematics).
- **2004/2005.**
 - (1) Course: FM1 - Equazioni differenziali e Meccanica (Bachelor's degree in Mathematics).
 - (2) Course: FM3 - Meccanica lagrangiana e hamiltoniana (Bachelor's degree in Mathematics).
- **2005/2006.**
 - (1) Course: FM1 - Equazioni differenziali e Meccanica (Bachelor's degree in Mathematics).
 - (2) Course: FM3 - Meccanica lagrangiana e hamiltoniana (Bachelor's degree in Mathematics).
- **2006/2007.**
 - (1) Course: FM1 - Equazioni differenziali e Meccanica (Bachelor's degree in Mathematics).
 - (2) Course: FM3 - Meccanica lagrangiana e hamiltoniana (Bachelor's degree in Mathematics).
- **2007/2008.**
 - (1) Course: FM1 - Equazioni differenziali e Meccanica (Bachelor's degree in Mathematics).
 - (2) Course: FM3 - Meccanica lagrangiana e hamiltoniana (Bachelor's degree in Mathematics).
 - (3) Course: PFB - Preparazione alla prova finale di tipo B (Bachelor's degree in Mathematics).
- **2008/2009.**
 - (1) Course: FM1 - Equazioni differenziali e Meccanica (Bachelor's degree in Mathematics).
 - (2) Course: FM3 - Meccanica lagrangiana e hamiltoniana (Bachelor's degree in Mathematics).
 - (3) Course: PFB - Preparazione alla prova finale di tipo B (Bachelor's degree in Mathematics).
 - (4) Course: Argomenti scelti di sistemi dinamici (PhD in Mathematics).
- **2009/2010.**
 - (1) Course: FM1 - Equazioni differenziali e Meccanica (Bachelor's degree in Mathematics).
 - (2) Course: FM3 - Meccanica lagrangiana e hamiltoniana (Bachelor's degree in Mathematics).
 - (3) Course: PFB - Preparazione alla prova finale di tipo B (Bachelor's degree in Mathematics).
 - (4) Course: FM9 - Sistemi dinamici (Master's degree in Mathematics and PhD in Mathematics).
- **2010/2011.**
 - (1) Course: FM210 - Fisica Matematica 1 (Bachelor's degree in Mathematics).
 - (2) Course: FM410 - Fisica Matematica 3 (Master's degree in Mathematics).
 - (3) Course: PFB - Preparazione alla prova finale di tipo B (Bachelor's degree in Mathematics).
- **2011/2012 (sabbatical).**
 - (1) Course: PFB - Preparazione alla prova finale di tipo B (Bachelor's degree in Mathematics).

- **2012/2013.**
 - (1) Course: FM410 - Fisica Matematica 3 (Master's degree in Mathematics).
 - (2) Course: Matematica I (Bachelor's degree in Geological Sciences).
 - (3) Course: PFB - Preparazione alla prova finale di tipo B (Bachelor's degree in Mathematics).
- **2013/2014.**
 - (1) Course: FM410 - Fisica Matematica 3 (Master's degree in Mathematics).
 - (2) Course: Matematica I (Bachelor's degree in Geological Sciences).
 - (3) Course: PFB - Preparazione alla prova finale di tipo B (Bachelor's degree in Mathematics).
- **2014/2015.**
 - (1) Course: FM410 - Fisica Matematica 3 (Master's degree in Mathematics).
 - (2) Course: Matematica I (Bachelor's degree in Geological Sciences).
 - (3) Course: PFB - Preparazione alla prova finale di tipo B (Bachelor's degree in Mathematics).
- **2015/2016.**
 - (1) Course: FM410 - Fisica Matematica 3 (Master's degree in Mathematics).
 - (2) Course: Matematica I (Bachelor's degree in Geological Sciences).
 - (3) Course: PFB - Preparazione alla prova finale di tipo B (Bachelor's degree in Mathematics).
- **2016/2017.**
 - (1) Course: FM410 - Fisica Matematica 3 (Master's degree in Mathematics).
 - (2) Course: Matematica - Modulo I (Bachelor's degree in Geological Sciences).
- **2017/2018.**
 - (1) Course: FM410 - Fisica Matematica 3 (Master's degree in Mathematics).
 - (2) Course: Matematica - Modulo I (Bachelor's degree in Geological Sciences).
- **2018/2019.**
 - (1) Course: FM210 - Meccanica Analitica (Bachelor's degree in Mathematics and Bachelor's degree in Physics).
 - (2) Course: FM410 - Complementi di Meccanica Analitica (Master's degree in Mathematics and Bachelor's degree in Physics).
- **2019/2020 (sabbatical).**

6 Reviewing activity

- Referee for the journals (104):
 - Annali della Scuola Normale Superiore di Pisa. Classe di Scienze* (1),
 - Archives for Rational Mechanics and Analysis* (1),
 - Banach Center Publications* (1),
 - Communications in Contemporary Mathematics* (2),
 - Communications in Mathematical Physics* (46),
 - Communications on Pure and Applied Analysis* (3),
 - Discrete and Continuous Dynamical Systems Series A* (1),
 - Discrete and Continuous Dynamical Systems Series S* (1),
 - Dynamical Systems* (2),
 - Dynamics and Stability of Systems* (1),
 - Ergodic Theory and Stability* (2),

Europhysics Letters (1),
Forum Mathematicum (1),
Journal de Mathématiques Pures et Appliquées (3),
Journal of Differential Equations (2),
Journal of Functional Analysis (1),
Journal of Mathematical Physics (5),
Journal of Nonlinear Science (1),
Journal of Physics A: Mathematical and General (5),
Journal of Statistical Physics (1),
Letters in Mathematical Physics (1),
Mathematical and Computer Modelling (1),
Mathematical Methods in the Applied Sciences (1),
Mathematical Physics Electronic Journal (4),
Meccanica (1),
Nonlinear Analysis Series B: Real World Applications (1),
Nonlinearity (6),
Physics Letters A (1),
Proceedings of The Royal Society of London. Series A. Mathematical, Physical and Engineering Sciences (1),
Regular and Chaotic Dynamics (1),
Reviews in Mathematical Physics (2),
SIAM Journal on Applied Dynamical Systems (1),
Symmetry, Integrability and Geometry: Methods and Applications (1),
Taiwanese Journal of Mathematics (1).

- Reviewer for *Mathematical Reviews* since October 1998 to June 2014 (200).
- Reviewer for *SIAM Review* (1).

7 Research programs

- Participant in the program *Sistemi dinamici e problemi di evoluzione in Fisica Matematica*, PRIN 1998 (scientific coordinator: Giovanni Jona Lasinio, local coordinator: Fabio Martinelli), program number 9802261238_004.
- Participant in the program *Sistemi dinamici e problemi di evoluzione in meccanica classica e meccanica statistica*, PRIN 2000 (scientific coordinator: Giovanni Jona Lasinio, local coordinator: Fabio Martinelli), program number MM02263577_005.
- Participant in the program *Sistemi dinamici in meccanica classica e problemi di evoluzione in meccanica statistica classica e quantistica*, PRIN 2002 (scientific coordinator: Giovanni Jona Lasinio, local coordinator: Fabio Martinelli), program number 2002027798_004.
- Participant in the program *Problemi di evoluzione per sistemi a molti corpi sia deterministici sia stocastici*, PRIN 2004 (scientific coordinator: Giovanni Jona Lasinio, local coordinator: Alessandro Pellegrinotti), program number 2004028108_003.
- Local coordinator of the program *Sistemi dinamici, equazioni alle derivate parziali e meccanica statistica*, PRIN 2008 (scientific coordinator: Giovanni Gallavotti), program number 2008R7SKH2_003.

- Responsabile scientifico locale del programma *Teorie geometriche e analitiche dei sistemi Hamiltoniani in dimensioni finite e infinite*, PRIN bando 2010-2011 (scientific coordinator: Boris Anatolevitch Dubrovin), program number 2010JJ4KPA_010.

8 Other activities

- Visiting professor at the *Department of Mathematics and Statistics*, Surrey University, Guildford, from 1st September 2005 to 31 August 2008 – extension of the appointment to 31 August 2011 – second extension of the appointment to 31 August 2014 – third extension of the appointment to 31 August 2017 – fourth extension of the appointment to 31 August 2020.
- Editor of the journal *Mediterranean Journal of Mathematics* since February 2016.
- Bruno Finzi Price Years 2010-2011.
- Opponent for the PhD thesis *Homoclinic splitting without trees*, Univesrity of Helsinki (candidate: Mikko Stenlund, advisor: Antti Kupiainen, defense: 20 Maggio 2006).
- Supervisor for the PhD thesis *Resonant solutions in the presence of degeneracies for quasi-periodically perturbed systems*, Università Roma Tre (candidate: Livia Corsi, external examiners: Massimiliano Berti and Antti Kupiainen, defense: 27 Gennaio 2012).
- Supervisor for the following Master’s degree theses:
 1. *Riduzione analitica dei diffeomorfismi del cerchio a una rotazione*, Università Roma Tre (candidate: Verbana Nori, defense: 29 October 2003);
 2. *Attrattori periodici per oscillatori quartici forzati in presenza di attrito*, Università Roma Tre (candidate: Stefano Zucchi, defense: 16 February 2005);
 3. *Selezione di attrattori periodici in sistemi dissipativi*, Università Roma Tre (candidate: Viviana Conflitti, defense: 25 May 2005);
 4. *Melnikov theory to all orders series for subharmonic solutions*, Università Roma Tre (candidate: Livia Corsi, defense: 21 May 2008);
 5. *Resonant tori and one-dimensional systems with quasi-periodic forcing*, Università Roma Tre (candidate: Roberto Feola, defense: 17 May 2012);
 6. *Teorema KAM: un approccio diagrammatico basato su tecniche multiscala* Università Roma Tre (candidate: Faenia Vaia, defense: 28 January 2016).
 7. *Quasi-periodic motions in strongly dissipative forced systems*, Università Roma Tre (candidate: Alessandro Mazzoccoli, discussione: 20 October 2016).
- External supervisor for the following Master’s degree theses:
 1. *Sincronizzazione in moti caotici*, Università di Roma “La Sapienza” (candidate: Leonardo De Carlo, internal supervisor: Giovanni Gallavotti, external supervisor: Alessandro Giuliani, defense: 25 September 2012).
 2. *Perturbed linear flows on the torus and conditions of convergence for the perturbation series*, Università di Roma “La Sapienza” (candidate: Giovanni Antinucci, internal supervisor: Massimo Testa, external supervisor: Giovanni Gallavotti, defense: 25 September 2013).
 3. *The study of Aubry-Mather sets: two different approaches*, Università di Roma “Tor Vergata” (candidate: Sara D’Ettore, internal supervisor: Alfonso Sorrentino, defense: 13 July 2016).