# CURRICULUM VITAE of ALESSANDRA CELLETTI

April 17, 2025

# 1 Personal data and coordinates

#### PLACE AND DATE OF BIRTH

Rome (Italy), February 12, 1962

NATIONALITY Italian

#### COORDINATES

 $\circ$  email: celletti@mat.uniroma2.it

 $\circ$  web page: https://www.mat.uniroma2.it/celletti/

 $\circ$  wikipedia https://en.wikipedia.org/wiki/Alessandra\_Celletti\_(mathematician)

# 2 Academic degrees

• Laurea in Mathematics: obtained on July 12, 1984 at the University of Roma "La Sapienza"; with full marks: 110/110 cum Laude; referee: Prof. G. Gallavotti; title of the dissertation: "Application of the perturbation theory of Hamilton–Jacobi and stability Kolmogorov-Arnold-Moser (KAM) theory to some problems of Celestial Mechanics"

Ph.D. in Mathematics: obtained on June 29, 1989 at the Federal Institute of Technology (ETH),
 Zürich (Switzerland); referee: Prof. J. Moser, coreferee: Prof. J. Waldvogel; title of the dissertation:
 "Analysis of Resonances in the Spin–Orbit Problem in Celestial Mechanics"

### **3** Positions

### **3.1** Actual positions

 $\circ$  Member of the Governing Board and Vice-President of "ANVUR - Italian National Agency for the Evaluation of Universities and Research Institutes" (2020-2026)

 $\circ$  Full Professor of Mathematical Physics at the Department of Mathematics, Università di Roma Tor Vergata.

### 3.2 **Previous positions**

 $\circ$  November 1999-January 2013: Associate Professor of Mathematical Physics at the Department of Mathematics, University of Roma Tor Vergata

 $\circ$  March 1990-October 1999: Associate Researcher of Mathematical Physics at the Department of Mathematics, University of L'Aquila.

### 4 Awards and honours

• Invited speaker at the "6th European Congress of Mathematics", Krakow, Poland, July 2012

• "Dirk Brouwer Career Award 2023", awarded by the American Astronomical Society's Division on Dynamical Astronomy (DDA)

 $\circ$  Plenary speaker at the "XXII Congress of the Italian Mathematical Union", Pisa, Italy, September 2023

• Member of the "Celestial Mechanics Institute" (since 2010)

• President of the Commission A4 "Celestial Mechanics and Dynamical Astronomy", International Astronomical Union (2018-2021)

• President (2001-2013) of the Italian Society of Celestial Mechanics and Astrodynamics (SIMCA)

• Correspondent and founding member of the Academia Cearense de Matematica, Brasil (2017-)

• Prize of the National Research Council for young researchers (June 1989)

• Finalist of the "First National competition" for scientific popular books, 2013

• Finalist of "Premio Galileo" for scientific popular books, May 2008

 $\circ$  The asteroid 2005 DJ1, n. 117539 bears the name "Alessandra Celletti"

### 5 Membership of scientific societies

- $\circ$  Since 1985 UMI Italian Mathematical Union
- Since 1985 National Group of Mathematical Physics GNFM-INdAM
- Since 2001 Italian Society of Celestial Mechanics and Astrodynamics (SIMCA)
- $\circ$  Since 2010 Celestial Mechanics Institute
- Since 2012 European Mathematical Society
- Since 2012 Astronomical International Union
- Since 2017 Academia Cearense de Matematica, Brazil
- Fall 2018 MSRI (Mathematical Sciences Research Institute), Berkeley, USA
- Since 2020 AcademiaNet (Swiss National Science Foundation)
- Since 2024 Association of Women in Mathematical Physics (AWMP)
- Since 2024 Italian Scientists Association (ISA)

### 6 Grants

• 2008, grant titled "Exploration studies of the Solar system" from the Italian Space Agency

 2011, EU grant: Marie Curie Initial Training Network "Astronet-II: The Astrodynamics Network" (2012-2016)

 2012, EU grant: Marie Curie Initial Training Network "Stardust: The asteroid and space debris network" (2013-2017)

 $\circ$  2016, grant titled "Theoretical support to the study of the Laplace resonance" from the Italian Space Agency

◦ 2018, PI of the project "MIUR-Dipartimento di Eccellenza" MATH@TOV - Dip. Matematica, Univ. Tor Vergata (2018-2020)

 2018, H.E.R.M.E.S. Pathfinder High Energy Rapid Modular Ensemble of Satellites, MIUR-ASI-INdAM (2018-2020)

 $\circ$  2018, grant titled "Scientific activities JUICE space mission, phase C/D: study of Laplace resonance with particular reference to dissipative effects" from the Italian Space Agency (2018-2020)

 $\circ$  2019, PI of the PRIN National Project "New frontiers of Celestial Mechanics: theory and applications", funded by M.I.U.R. (2019-2020)

 $\circ$  2019, EU grant: Marie Curie Initial Training Network "Stardust-Reloaded: The asteroid and space debris network" (2019-2023)

# 7 Scientific and academic positions

 $\circ$  Member of the Governing Board and vice-President of "ANVUR - Italian National Agency for the Evaluation of Universities and Research Institutes" (2020-2024); delegate for the evaluation of the research; coordinator of the evaluation of the quality of research in Italy - VQR 2015-2019.

• Board of Directors of the Italian Space Agency (ASI), May 2019-February 2020

 $\circ$  President (2018-2021) of the Commission A4 "Celestial Mechanics and Dynamical Astronomy", International Astronomical Union

• Member of the Scientific Committee of the "GranSasso Tech Foundation" (2024-2025)

 $\circ$  Member of several evaluation committees with different roles, including ERC and European Commission H2020

 $\circ$  Member of the advisory board of the project H2020 MSCA RISE "TraX - Transition and stability in physical processes" (2017-2021)

 $\circ$  Director of the Department of Mathematics, University of Roma Tor Vergata, November 2015–October 2018

 $\circ$  Elected vice-President (2015-2018) of the Organizing Committee "Celestial Mechanics" of the International Astronomical Union

 $\circ$  Elected Member (2013-2016, 2016-2020) of the Scientific Council of the Italian National Group of Mathematical Physics (GNFM)

• Elected Member (2015-2018) of the Scientific Committee of the Unione Matematica Italiana (UMI)

 $\circ$  Chair of the Women in Mathematics Committee of the European Mathematical Society (EMS) (2017-2022)

 Founder (in 2001), President (2001-2013), member of the Board of Directors (since 2013), member of the Scientific Council (since 2013), Director of the Scientific Council (2013-2016) of the SIMCA - Italian Society of Celestial Mechanics and Astrodynamics

• Member of the Scientific Committee of the "Genova Science Festival"

 $\circ$  Director of the Post-graduate Course in "Space Science and Technology", University of Roma Tor Vergata (2009-2020)

 $\circ$  Member of the Scientific Committee at the Department of Mathematics, University of Roma Tor Vergata (since 2013-2016)

• Member of the EMS/EWM Scientific Committee (since 2012)

• Member of the "Celestial Mechanics Institute" (since 2010)

• Member of the "Informal group in Planetary Science", ASI - Italian Space Agency, 2015-2017

• Member of the Academic Senate of the University of Roma Tor Vergata (2001-2010)

### 8 Editorial roles

• Editor in chief of "Celestial Mechanics and Dynamical Astronomy", Springer (since 2016)

• Associate editor of "Celestial Mechanics and Dynamical Astronomy", Springer (since 2006-2016)

• Associate editor of "Physica D", Elsevier (since 2022)

• Member of the editorial advisory board of the "Journal of Nonlinear Mechanics", Elsevier (since 2014)

• Member of the editorial board of "Regular and Chaotic Dynamics", Springer (since 2023)

• Member of the editorial board of the "Revista Matemática Complutense", Springer (since 2015)

• Associate editor of "Mathematics Research Reports" (since 2019)

• Associate editor of "Electronic Research Announcements in Mathematical Sciences (ERA-MS)" (2017-2019)

 $\circ$  Managing Editor of the Journal of the Italian Mathematical Union "La Matematica nella Società e nella Cultura" (2015-2021)

 $\circ$  Associate Editor of the Journal of the Italian Mathematical Union "La Matematica nella Società e nella Cultura" (since 2013)

• Associate editor of "Scholarpedia, Category: Celestial Mechanics" (since 2009)

 $\circ$  Associate editor of "Maddmaths!" (2012-2024)

 Referee of several journals (i.e., Advances Space Research, Acta Astronautica, MNRAS, Planetary and Space Science, CNSNS, Nonlinearity, Reg. Chaotic Dyn., SIAM J. Math. Analysis, Inventiones, J. Diff. Equations, Physica D)

# 9 Invited speaker at congresses and schools (partial list)

 $\circ$  Computer–assisted proofs in analysis, Oberwolfach, Germany, 4–10 March 1990

 $\circ$  Systemes Dynamiques Discrets, Aussois, France, 11–17 February 1996

 $\circ$  Astronomy and Astrophysics, organized by the Vatican Observatory (Specola Vaticana), Castelgandolfo, Roma (Italy), 15-21 June 1998

 $\circ$  Conference in honor of the 60–th birthday of Prof. J. Waldvogel, Swiss Polytechnic Institute (ETH), Zürich, Swiss, 1998

 $\circ$  "Singularités dans les systèmes gravitationnels", Arc2000, France, 12–18 March 2000

 $\circ$  5th Alexander von Humboldt colloquium for Celestial Mechanics "New developments in the dynamics of planetary systems", BadHofgastein, Austria, 19–23 March 2000

 $\circ$  NATO School "The Restless Universe: Applications of Gravitational N-Body Dynamics to Planetary, Stellar and Galactic Systems", Blair Atholl, Scotland, 23 July – 5 August 2000

"Dynamical systems: classical, quantum, stochastic", Teulada (Cagliari), Italy, 23–30 September 2000
NATO School "Chaotic worlds: from order to disorder in N–body gravitational systems", Cortina d'Ampezzo, Italy, 8–20 September 2003

 $\circ$ School "Analyse harmonique et approximation rationnelle: leurs rôle en théorie du signal, du contrôle et des systémes dynamiques", Porquerolles, France, 14–20 September 2003

• Workshop "The rotation of celestial bodies", Namur, Belgium, 1–2 December 2005

• "Atelier de Mechanique Celeste", Aussois, France, 12–17 March 2006

• "Dynamics, Topology and Computations", Bedlewo, Poland, 4–10 June 2006

 $\circ$  "7th Alexander von Humboldt Colloquium", Bad Hofgastein, Salzburg, Austria, 30 March–5 April 2008

• "International Conference on the Dynamics of Celestial Bodies", Litohoro, Greece, 23-26 June 2008

 $\circ$  "Conference on Stability and Instability in Mechanical Systems: Recent Progress and Mathematical Theory", Barcelona, Spain, 22–26 September 2008

• "KAM theory and applications", Leiden, The Netherlands, 1-5 December 2008

o "Convegno Astronomia: storia e cultura", Campobasso, Italy, 21 May 2009

 $\circ$  "Dynamics, Topology and Computations", Bedlewo, Poland, 31 May – 6 June 2009

 $\circ$  "La dynamique des systemes gravitationnels: defis et perspectives", Aussois, France, 28 June – 4 July 2009

• Assemblea GNFM, Montecatini, Italy, 1–3 October 2009

• "Classical and weak KAM theorem", Montegrotto, Italy, 14–19 February 2010

 $\circ$  "SIAM conference", Barcelona, Spain, 31 May – 5 June 2010

 $\circ$ "Scuola estiva di fisica matematica del GNFM", Ravello, Italy, 13–25 September 2010

• "Dynamical Days", Calatayud, Spain, 4 – 6 November 2010

• "Sistemi dinamici nonlineari e applicazioni", Pisa, Italy, 18–19 February 2011

 "8th Alexander von Humboldt Colloquium – Resonances in n-body systems", Bad Hofgastein, Salzburg, Austria, 20–26 March 2011

 $\circ$  "XVI Conference on Waves and Stability in Continuous Media – WASCOM", Brindisi, Italy, 13–17 June 2011

o "Stabilitá ed Analisi Qualitativa nei Sistemi Dinamici", Levico Terme, Italy, 4–5 October 2011

 "I LINCEI PER LA SCUOLA", Lezioni Lincee di Matematica con Applicazioni alla Meccanica Celeste e alla Relativitá, Roma, Italy, 18 October 2011

• Invited lecture "6th European Congress of Mathematics", Cracow, Poland, 2–7 July 2012

 $\circ$  Invited speaker at the "First International Conference on Dynamics of Differential Equations", Georgia Tech, Atlanta, USA, 15–20 March 2013

o "Planetary Motions, Satellite Dynamics, and Spaceship Orbits", Montreal, Canada, 22–26 July 2013

 $\circ$  Invited speaker at "Celestial, Molecular, and Atomic Dynamics (CEMAD-2013)", PIMS - Pacific Institute for the Mathematical Sciences, Victoria, Canada, 29/7-2/8/2013

 $\circ$  Invited speaker workshop "Symplectic techniques in topology and dynamics", Cologne (Germany), 22-26 September 2014

 $\circ$  Invited speaker "International Workshop in Astronomy and Dynamics", Observatoire de Paris, 28-30 April 2015

 $\circ$  Invited speaker "Integrability in Mechanics and Geometry: Theory and Computations", ICERM, Brown University, 1-5 June 2015

o Invited speaker "Global Dynamics in Hamiltonian Systems", Nuria (Spain), 28 June - 4 July 2015

"13th winter school in Dynamical Systems of the DANCE (Dinámica, Atractores y Nolinealidad: Caos y Estabilidad) Spanish network", Siviglia (Spagna), 25-29 January 2016

• "Mini-course on Dynamics and Differential Equations", Lisbona (Portugal), 29-30 March 2016

 $\circ$  "The Dynamics of Complex Systems: A meeting in honour of the 60th birthday of Robert MacKay", Warwick (UK), 18-20 May 2016

• "Computational perturbative methods for Hamiltonian systems", Athens (Greece), 11-13 July 2016

o "7ECM - European Congress of Mathematics", EWM Public talk, Berlin (Germany), 18-22 July 2016

 $\circ$ Workshop "Chaotic phenomena in mathematical models", Centro De Giorgi, Scuola Normale Superiore, Pisa, 9-10 Settembre 2016

o "9th Humboldt Colloquium on Celestial Mechanics", Bad Hofgastein, 20-25 March 2017

 $\circ$  "WASCOM 2017 - XIX International Conference on waves and stability in Continuous media", Bologna, 12-16 June 2017

 $\circ$  "LLAVEFEST: A broad perspective on finite and infinite dimensional Dynamical Systems", Barcelona, 12-16 June 2017

o "FoCM 2017 - Workshop Computational Dynamics", Barcelona, 13-15 July 2017

• "Mini-workshop in Celestial Mechanics", Torino, 17-18 December 2017

o "Festa di Scienza e di Filosofia", Foligno, 26-29 Aprile 2018

"Perspectives in Hamiltonian Dynamics", Venezia, 18-22 Giugno 2018

 "Connections for Women: Hamiltonian Systems, from topology to applications through analysi"s, MSRI, Berkeley (USA), August 2018

 "Introductory Workshop: Hamiltonian systems, from topology to applications through analysis", MSRI, Berkeley (USA), August 2018

• "Between Mathematics and Astronomy", Pisa (Italy), September 2018

o "DinAmici", Accademia Nazionale dei Lincei, Rome (Italy), December 2018

• "Current Trends in Mathematics", Zürich (Switzerland), March 2019

• "Interactions of symplectic topology and dynamics", Cortona (Italy), June 2019

• "New Trends in Celestial Mechanics", Cogne (Italy), June 2019

 $\circ$  "On the Trail of Women in Mathematics: conference in honor of Sofia Kowalewska, Cracow, 31 August-2 September 2019

• "Stardust-R Opening Training School", Glasgow, 2-7 December 2019

 $\circ$  "40 years of the Mathematics department", University of Catania, Italy, November 2019

• "I-CELMECH Training School", Milano, Italy, 3-7 February 2020

 $\circ$  "DDA - Division on Dynamical Astronomy meeting, Arizona, USA, 5 August 2020

• "The Global Virtual Workshop I - Stardust-R", 7-20 September 2020

• "Perspektywy Women in tech Summit 2020", 8-9 December 2020

• "Mini-workshop ASI-Tor Vergata", Rome, Italy, 21 May 2021

 $\circ$  "CIRM Conference "Analysis, Control, and Numerics for PDE Models of Interest to Physical and Life Sciences", Levico Terme, 20-24 September 2021

o "Conference Regular & Chaotic Dynamics", Moscow, Russia, 22 November-3 December 2021

 $\circ$ "XX Colóquio Brasileiro del Dinamica Orbital", 6-10 December 2021

o "Matemairacorana Workshop", Brazil, 5 April 2022

• "Workshop "Theory, models and simulations in Celestial Mechanics", Pisa, 14-16 June 2022

 $\circ$  "BIRS-CMO Workshop - Geometric and Variational Methods in Celestial Mechanics", Oaxaca, Mexico, 20-24 June 2022

o "H2020 in Hamiltonian Dynamics", Venice, Centro Culturale Don Orione, July 25-29, 2022

 $\circ$  "CELTA ASI School 2022 - From Stardust to Extrasolar Planets", Inverness and Sabhal Mór Ostaig, Isle of Skye, Scotland 15-27 August 2022

o "Dynamical Systems of Classical and Celestial Mechanics, Sirius, Sochi, 19-23 September 2022

 $\circ$  "100 years of the Italian Mathematical Union", L'Aquila, 24 November 2022

 $\circ$  "A 3-day workshop in Hamiltonian Systems and Celestial Mechanics", Torino, Italy, 14-16 December 2022

 $\circ$  "International workshop on Celestial Mechanics and Dynamical Astronomy", Central University of Rajasthan, India, 6-8 January 2023

• "New frontiers of Celestial Mechanics: theory and applications", Padova (Italy), 15-17 February 2023

 $\circ$  "DDA - Division on Dynamical Astronomy meeting", Univ. East Lensing, Michigan, USA, May 2023

• "Highlights in Nonlinear Analysis", Cetraro (Italy), 12-16 June 2023

Plenary speaker at the "XXII Congress of the Italian Mathematical Union", Pisa, 4-9 September 2023
Conference on Advances in NUmerical analysis in TOrino, Torino (Italy), 2-4 November 2023

 Brouwer prize Lecturer at the "DDA - Division on Dynamical Astronomy meeting", Toronto (Canada), 13-17 May 2024

o "Dynamics and Physics in the Solar system", Pisa (Italy), 18-21 June 2024

o "IndAM Day", Varese (Italy), 2 October 2024

 $\circ$ "Giornata Italiana dello Spazio", Panama, 25 October 2024

• "Women in Mathematics", Palermo (Italy), 6-7 February 2025

• During the COVID-19 time, invited to deliver virtual seminars at different institutions worldwide, e.g. Paris Dynamical Seminar (France), Maryland Dynamics Seminar (USA), Mathematical Physics Seminar at Yeshiva University, New York (USA), Nanjing University (China)

### 10 Organization of congresses, workshops and schools

1) Workshop "Dynamical Systems", Dept. Mathematics, University of L'Aquila, 13–16 May 1991, in collaboration with P. Negrini and A. De Masi.

2) Workshop "A meeting on chaos", Dept. Mathematics, University of L'Aquila, 26–27 November 1992, in collaboration with D. Benedetto and G. Paladin.

3) "First National Meeting on Celestial Mechanics CELMEC" at the Dept. Mathematics, University of L'Aquila, 24–27 May 1993. Scientific Committee: G. Gallavotti (Università di Roma "La Sapienza"), A. Milani (Università di Pisa), A. Celletti. Organizing Committee: A. Celletti, E. Perozzi (Telespazio, Roma).

4) "Second National Meeting on Celestial Mechanics CELMEC", Scuola Superiore "G. Reiss Romoli", L'Aquila, 21–24 April 1997. Scientific Committee: A. Celletti, A. Milani (Università di Pisa), E. Perozzi (Telespazio, Roma), G.B. Valsecchi (CNR, Roma).

5) Member of the Scientific Committee of the "Troisieme Atelier formation d'hiver d'Arc 2000", "Singularities dans les systemes gravitationnels application au transport chaotique dans le systeme solaire", Arc2000, France, 12–18 March 2000.

6) "Regular and unstable motions in Hamiltonian system", Roma, 6–9 September 2000, Organizing Committee: A. Celletti, L. Chierchia (Roma Tre), C. Liverani (Roma Tor Vergata), G. Mancini (Roma Tre).

7) "Third International Meeting on Celestial Mechanics - CELMEC III", Villa Mondragone, Monte Porzio Catone (Roma), 18-22 June 2001, Organizing Committee: A. Celletti, A. Milani (Università di Pisa), E. Perozzi (Telespazio, Roma), G.B. Valsecchi (CNR, Roma).

8) "Perspectives in Mathematical Physics", Roma, 4–7 September 2002, Organizing Committee: G. Benettin (Univ. Padova), G. Benfatto (Univ. Roma Tor Vergata), F. Bonetto (IAS, Princeton), M. Cassandro (Univ. Roma "La Sapienza), A. Celletti (Univ. Roma Tor Vergata), R. Esposito (Univ. L'Aquila), C. Falcolini (Univ. Roma Tre), A. Giorgilli (Univ. Milano), V. Mastropietro (Univ. Roma Tor Vergata).

**9)** Member of the Scientific Committee of the school "Analyse harmonique et approximation rationnelle: leurs rôle en théorie du signal, du contrôle et des systémes dynamiques", Porquerolles (France), 14–20 September 2003.

10) "Fourth International Meeting on Celestial Mechanics - CELMEC IV", San Martino al Cimino (Viterbo), 11-16 September 2005; Organizing Committee: A. Celletti, A. Milani (Università di Pisa), E. Perozzi (Telespazio, Roma), G.B. Valsecchi (CNR, Roma).

11) "Theory and Applications of Dynamical Systems", Spoleto (Perugia, Italy), 24–28 June 2007; Organizing Committee: A. Celletti (co–chair), E. Lega (co–chair), F. Namouni (co–chair), D. Benest (Osservatorio di Nizza), A. Giorgilli (Universitá di Milano), M. Guzzo (Universitá di Padova), D. Laveder (Osservatorio di Nizza), G. Valsecchi (INAF–IASF, Roma).

12) Member of the Scientific Committee of the "7th Alexander von Humboldt Colloquium for Celestial Mechanics – The chaotic dynamics of small bodies and planets", Bad Hofgastein, Salzburg, Austria, 30 March – 5 April 2008.

13) "Fifth International Meeting on Celestial Mechanics - CELMEC V", 6–12 September 2009; Organizing Committee: A. Celletti, A. Giorgilli (Università di Milano), E. Perozzi (Telespazio, Roma), G.B. Valsecchi (CNR, Roma).

14) "Women and Space", 8 October 2009, Accademia Nazionale dei Lincei, Roma (Italy); Organizing Committee: V. Baldoni (Univ. Roma Tor Vergata), A. Celletti, A. Coradini (INAF/IFSI), E. Strickland (Univ. Roma Tor Vergata.

15) Member of the Scientific Committee of the "8th Alexander von Humboldt Colloquium for Celestial Mechanics – The chaotic dynamics of small bodies and planets", Bad Hofgastein, Salzburg, Austria, 20–26 March 2011.

16) "Frontiers of Space Science: from Solar Activity to NEOs", L'Aquila (Italy), 17–22 April 2011, co-directed with F. Berrilli, E. Flamini, D. Müller, E. Perozzi.

17) "Astrodynamics of Natural and Artificial Satellites: from Regular to Chaotic Motions", First school of the Astronet-II EU project, Rome, January 2013

**18)** "CELMEC VI - 6th International Meeting in celestial Mechanics", 1–7 September 2013, S. Martino al Cimino (Viterbo, Italy), in collaboration with A. Giorgilli (Università di Milano), G.F. Gronchi (Università di Pisa), E. Perozzi (Telespazio, Roma).

19) Scientific director of the workshop "Mathematical models and methods for Planet Earth", INdAM, 27–29 May 2013, in collaboration con U. Locatelli (Univ. Roma Tor Vergata), T. Ruggeri (Univ. Bologna), E. Strickland (Univ. Roma Tor Vergata).

**20)** Member of the Scientific and Organizing Committee of the workshop "Planetary Motions, Satellite Dynamics, and Spaceship Orbits", Montreal, 22–26 July 2013, in collaboration with Walter Craig (Mc-Master University), Florin Diacu (University of Victoria), Jacques Fejoz (Paris VI), Anatoly Neishtadt (Loughborough University), Christiane Rousseau (Montreal University).

**21)** Member of the Scientific Committee of the IAU Symposium IAUS 310 "Complex Planetary Systems (CPS)", University of Namur (Belgio), 7-11 July 2014

**22**) Stardust Second Training School "Astrodynamics of NEO and Space debris", Roma, 8-12 September 2014, in collaboration with F. Gachet, I. Gkolias, G. Pucacco, A. Rossi.

**23)** The 17th EWM general meeting, Cortona (Italy), from 31-8-2015 to 4-9-2015, co-organizer with Lisbeth Fajstrup, Colette Guillopé, Angela Pistoia, Marie-Francoise Roy, Susanna Terracini (chair)

24) Sessione di Fisica Matematica, XX Congresso UMI Unione Matematica Italiana, Siena, 7-12 September 2015

**25)** Mini-Symposium: Resonances and chaos in Earth's orbit, Stardust Final Conference on Asteroids and Space Debris, ESTEC, Netherlands, 31 October 2016 - 4 November 2016, in collaboration with Giuseppe Pucacco, Alessandro Rossi

**26)** Scientific Committee of the "9th Humboldt Colloquium on Celestial Mechanics", Bad Hofgastein, 20-25 March 2017

27) Co-organizer of the school "Satellite Dynamics and Space Missions: Theory and Applications of Celestial Mechanics", San Martino al Cimino (VT), 28/8-2/9-2017

**28)** Co-organizer of the "CELMEC VII - The Seventh International Meeting on Celestial Mechanics", San Martino al Cimino (VT), 3-9 September 2017

**29)** Scientific Committee of "Analysis and Dynamics: Conference in occasion of Luigi Chierchia's 60' Birthday" Marina di San Gregorio, Lecce 12-15 October 2017

**30)** Scientific Committee of the PISA-HOKKAIDO-ROMA2 Summer School on Mathematics and Its Applications 2018, Centro di Ricerca Matematica Ennio De Giorgi, Pisa, 27 August 2018 - 8 September 2018

**31)** Scientific Committee of the workshop "Hamiltonian systems, from topology to applications through analysis I", MSRI, Berkeley, 8-12 October 2018

**32)** Scientific Committee of the workshop "Hamiltonian systems, from topology to applications through analysis II", MSRI, Berkeley, 26-30 November 2018

**33)** Scientific and Organizing Committee of the workshop "Dynamical Systems: from geometry to mechanics", Rome, 5-8 February 2019

**34)** Scientific and Organizing Committee of the workshop "Mathematical Models and Methods in Earth and Space Sciences", Rome, 19-22 March 2019

**35)** Scientific Committee of the workshop "New Trends in Celestial Mechanics", Cogne, Valle d'Aosta, Italy, 24-28 June 2019

36) Scientific Committee of "I-CELMECH Training School", Milan, Italy, 3-7 February 2020

**37)** Scientific and Organizing Committee of the Training School III of the Stardust-R project on "Space Environment Stability and Resilience", Iasi (Romania), 15-19 March 2021

**38)** Scientific Organising Committee of the IAU Symposium n. 364 "Multi-scale (time and mass) dynamics of space objects", Iasi (Romania), 18-22 October 2021

**39)** Member of the Scientific Organising Committee of the "CELTA ASI School 2022 - From Stardust to Extrasolar Planets", Inverness and Sabhal Mór Ostaig, Isle of Skye, Scotland 15-27 August 2022

**40)** Co-organizer of the "CELMEC VIII - The Eighth International Meeting on Celestial Mechanics", Rome, 5-9 September 2022

**41)** Member of the Scientific Committee of "On the Trail of Women in Mathematics", Gdansk, 15-17 September 2022

**42)** Member of the Scientific Committee of "Space Environment Management & Sustainability Symposium - The 2nd International Stardust Conference", ESA-ESTEC, Noordwijk, The Netherlands, 7-11 November 2022

**43)** Member of the Scientific Committee of the "IAU Symposium 382 Complex Planetary Systems II - Kavli", Namur (Belgium), 3-7 July 2023

44) Member of the Scientific Committee of the "MINI-CELMEC VIII", Rome (Italy), 12 September 2023

**45)** Member of the Scientific Committee of the workshop "New trends and challenges in optimization theory applied to space engineering", L'Aquila (Italy), 13-15 December 2023

46) Co-organizer of the conference "Women and Space", Accademia Nazionale dei Lincei, 28 May 202447) Member of the Scientific Committee of the conference "On the Trails of Mathematics", Bedlewo (Poland), 8-11 November 2024

**48)** Member of the Scientific Committee of the conference "The Art of the Invisible Force: The Dynamics of Equilibria Near and Far", Budapest (Hungary), 2-4 June 2025

**49)** Member of the Scientific Committee of the conference "DyToComp 2025, an international conference on computational topology and dynamics", Bedlewo (Poland), 22-28 June 2025

**50)** Co-organizer of the "CELMEC IX - The Ninth International Meeting on Celestial Mechanics", Viterbo, 7-11 September 2026

# **11** Supervision of students and postdoctoral fellows

• 4 Bachelor students (Mathematics degree)

• 17 Master students (Mathematics degree)

• 12 Students of the Post-graduate Course in Space Science and Technology

- $\circ$  10 PhD students
  - Alessia Francesca Guido (2024 on-going)
  - Efsevia Karampotsiou (2021, Univ. of Thessaloniki, Greece, on-going)
  - Tudor Vartolomei (2023 Marie Curie fellow)
  - Irene De Blasi (2022)
  - Mauricio Misquero Castro (2020)
  - Fabien Gachet (2017 Marie Curie fellow)
  - Ioannis Gkolias (2017 Marie Curie fellow)
  - Letizia Stefanelli (2011)
  - Sara Di Ruzza (2010)
  - Gabriella Della Penna (2001)

• 12 Postdoc researchers/Marie Curie fellows

- Adrian Bustamante, Postdoc, Univ. Roma Tre, Italy
- Anargyros Dogkas, PhD., Univ. Pisa, Italy
- Marta Ceccaroni, Lecturer, Cranfield University, UK (Marie Curie fellow)
- Marco Cinelli, Postdoc, National Institute of Astrophysics, Italy
- Catalin Gales, Full Professor, Al. I. Cuza University of Iasi, Romania
- Joan Gimeno, Postdoc, Georgia Institute of Technology, USA
- Christoph Lhotka, Associate Professor, Univ. Roma Tor Vergata, Italy
- Mauricio Misquero (Marie Curie fellow)
- Fabrizio Paita, Game Analyst, Popcore, Spain
- Aaron Rosengren, Professor, UC San Diego, USA (Marie Curie fellow)
- Massimo Vetrisano, ESA ESTEC for DEIMOS SPACE (Marie Curie fellow)
- Mara Volpi, Univ. Roma Tor Vergata, Italy

# 12 Teaching activity

The list below refers to one-semester courses, it does not include teaching at summer/winter schools or for short periods (on leave at ANVUR from 2020 to 2026):

 $\circ$  from 2020 to 2026 on leave, working at ANVUR without teaching duties

 $\circ$  from the academic year 2010-2011 to the academic year 2019-2020: coordinator of the postgraduate course on Space Science and Technology (https://www.mat.uniroma2.it/masterst/), University of Rome Tor Vergata, Italy

 $\circ$  from the academic year 1999-2000 to the academic year 2019-2020: master course of Classical and Celestial Mechanics, University of Rome Tor Vergata, Italy

 $\circ$ academic year 1999-2000: master course on PDEs in Mathematical Physics, University of Rome Tor Vergata, Italy

 $\circ$  from the academic year 2000-2001 to the academic year 2019-2020: bachelor courses of programming languages in C and Matlab, University of Rome Tor Vergata, Italy

 $\circ$  from the academic year 1990-1991 to the academic year 1998-1999: master course of Classical and Celestial Mechanics, University of L'Aquila, Italy

 $\circ$ academic years 2006-2007, 2007-2008: PhD courses on Celestial Mechanics, University of Rome Tor Vergata, Italy

 academic years 2007-2008, 2008-2009: postgraduate courses on Dynamical Systems and Celestial Mechanics, University of Rome Tor Vergata, Italy

• from the academic year 2007-2008 to the academic year 2010-2011: postgraduate online degree in "Frontiers of Physics", course on Celestial Mechanics, University of Rome Tor Vergata, Italy

 $\circ$  from the academic year 2007-2008 to the academic year 2010-2011: postgraduate online degree in "Communicate and calculate", course on programming in C with applications to Astronomy, University of Rome Tor Vergata, Italy

◦ years 1986-1989: exercise sessions at the ETH Zürich on ODEs, Linear algebra, Numerical analysis

### **13** Public outreach activities

### 13.1 Popular books

- Celletti A., Perozzi L., "Meccanica Celeste", Casa editrice CUEN, Napoli, 1996

- Celletti A., Perozzi E., "Celestial Mechanics: The Waltz of the Planets", Springer-Praxis, January

- 2007; traduzione italiana: "Meccanica Celeste: ordine e caos nel sistema solare", UTET 2007
- Celletti A., Perozzi E., "Pianeti per caso", UTET 2012

- Celletti A., "La Meccanica Celeste", RCS - Corriere della Sera 2019

#### **13.2** Popular papers

- Celletti A., Perozzi E., Il ritorno del caos, L'Astronomia, Ottobre 1991

- Celletti A., Perozzi E., Dobbiamo dire grazie alla Luna, La Stampa, 26 Maggio 1993
- Celletti A., Assonanze cosmiche, L'Astronomia, Agosto-Settembre 1995
- Celletti A., Il minuetto dei pianeti, L'Astronomia, Aprile 2000
- Celletti A., Esisterá per sempre il Sistema Solare?, Le Stelle, Novembre 2004
- Celletti A., La disordinata regolarita' dei moti celesti, Coelum, Marzo 2007
- Celletti A., Il buio oltre Nettuno, Le Stelle, Dicembre 2007
- Celletti A., The dark side of Mercury, Maddmaths! Marzo 2010
- Celletti A., Da Keplero alle missioni spaziali, Maddmaths! July 2013

- Celletti A., Kanas S., Underrepresentation of Women in Editorial Boards of Scientic and EMS Journals, EMS Magazine, issue 118, December 2020

- Celletti A., Di chi sono quei rifiuti spaziali?, L'Essenziale, 15 December 2022

#### **13.3** Public conferences

• Several conference for high school students, among which:

- $\triangleright$  High schools stage in Astrophysics and Celestial Mechanics during the years 2010, 2014, 2015
- ▷ High schools 1-day meetings on Celestial Mechanics during the years 2010, 2011

▷ Conference "LINCEI for the school", Accademia Nazionale dei Lincei, Roma, Italy, 18 October 2011

▷ Conference "Giornata dell'ambiente dei Lincei", Accademia Nazionale dei Lincei, Roma, Italy, 13 December 2021

▷ Meteorites, comets and Space debris, Pisa, Italy, 16 April 2021

• Public lecture "Chaotic routes that shaped the universe: a history of some outstanding women scientists" at the 7th European Congress in Mathematics, European Women in Mathematics, Berlin (Germany), 18-22 July 2016

 Public lecture "L'attrazione invisibile dell'universo" within "Viaggio nella complessitá della vita", Teatro Parioli, Roma, 20 September 2024

• Several conference in libraries, bookshops, science festivals.

### **13.4** Organization of conferences

 Co-organizer of the conference "Women and Space", 8 Ottobre 2009, Accademia Nazionale dei Lincei, Roma (Italy); Organizing Committee: V. Baldoni (Univ. Roma Tor Vergata), A. Celletti, A. Coradini (INAF/IFSI), E. Strickland (Univ. Roma Tor Vergata).

 Co-organizer of the conference "Women and Space", 28 May 2024, Accademia Nazionale dei Lincei, Roma (Italy); Organizing Committee: A. Celletti, U. Locatelli, A. Sorrentino, E. Strickland (Univ. Roma Tor Vergata).

### 13.5 Radio/TV interviews and broadcasts

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• Several radio, newspaper, interviews and TV broadcasts among which:
                           \triangleright Women in Science
                           https: //www.raiplay.it/video/2019/01/memex-pt4-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-celletti-2018-raiplay-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea13f11-be37-cea1
4452 - 959a - 71d5f6a619c4.html
                           \triangleright Our chaotic Solar system
                           https: //maddmaths.simai.eu/divulgazione/conferenza-di-alessandra-celletti-il-nostro-divelopment and the standard stan
caotico-sistema-solare-dai-pianeti-ai-detriti-spaziali-video/
                           ▷ From Kepler to dark matter through women scientists, Accademia Nazionale dei Lincei
                           https: //www.youtube.com/watch?v = hb0dSOlokPw
                           ▷ Applications of Mathematics to Astronomy
                           https: //www.aracne.tv/video/l-applicazione-della-matematica-in-campo-astronomico.html
                           \triangleright Time: a debate between a scientist and a novel writer
                           https://maddmaths.simai.eu/divulgazione/archivio-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmaths-presentazioni-multimediali/maddmat
racconta - 3 - lodoli - e - celletti - parlano - del - tempo/
                           ▷ Archeoastronomy
                           https://www.raiplay.it/video/2020/02/Archeoastronomia-un-viaggio-nel-tempo-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef92-11efef9
8cfd - 4005 - acbc - 84fab5761e03.html
                           ▷ Women and Science
                           https://www.rai.it/dl/portaleRadio/media/ContentItem - b0acd008 - 943c - 436a - 9084 -
 fd623c834fcf.html
                           \triangleright Women in Mathematics
                           https: //maddmaths.simai.eu/divulgazione/eventi/festa - delle - donne - matematiche 2020/locality - 
                           ▷ Podcast Radio3 Scienza
                           https: //maddmaths.simai.eu/comunicare/rasseqna - stampa/radio/radio3 - scienza - che - stampa/radio/radio3 - scienza - stampa/radio/radio3 - scienza - che - stampa/radio/radio3 - scienza - scienza - stampa/radio/radio3 - scienza - stampa/radio3 - scienza - 
genere - di - scienza - podcast - del - 3 - gennaio - 2017/
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#### 13.6 Videos

 $\triangleright$  From zero to infinity (and back). Short history of the Universe - Part 1

https: //www.asitv.it/media/v/8e770adf - c86c - 468f - a8a6 - 427acf9e4983/i - numeri - dell - universo - prima - parte

 $\triangleright$  From zero to infinity (and back). Short history of the Universe - Part 2

https://www.asitv.it/media/v/6adf265f-683f-4857-8ae0-da65c2ca0f19/i-numeri-dell-universo-da-1-a-800

▷ From zero to infinity (and back). Short history of the Universe - Part 3

https: //www.asitv.it/media/v/c52d688a - 1e89 - 4eaa - b61c - 38a9618f35c1/i - numeri - dell - universo - terza - parte

#### 13.7 Blogs

 Celletti A., Strickland E., "Mathematical models and methods for Planet Earth" - 25 May 2013 http://mpe2013.org/2013/05/25/6553/

 Celletti A., "KAM Theory and Celestial Mechanics" - 24 June 2013 http://mpe2013.org/2013/06/24/kam - theory - and - celestial - mechanics/

### 14 Miscellanea

 $\circ$  Selected by Fondazione Bracco as one of the 100 Experts in STEM disciplines, https: //100 experte.it/

 $\circ$  Selected by the magazine "D-Donna Repubblica" as one of the first 10 Italian women of the year 2019

 $\circ$  Selected by the magazine "Forbes" as one of the first 100 Italian successful women in 2020