

Raffaele D'Ambrosio, Ph.D.

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Current position

Since April 1, 2021 ■ **Full Professor**, Department of Information Engineering and Computer Science and Mathematics, University of L'Aquila. Scientific Disciplinary Group: 01/MATH-05 (Numerical Analysis); Scientific Disciplinary Sector: MATH-05/A (Numerical Analysis).

Previous Positions

- September 1, 2017–March 31, 2021 ■ **Associate Professor**, Department of Information Engineering, Computer Science and Mathematics, University of L'Aquila. Academic Recruitment Field 01/A5 (Numerical Analysis); Scientific Disciplinary Sector MAT/08 (Numerical Analysis).
- April 15, 2015–August 31, 2017 ■ **Fixed-Term Researcher (Law 240/2010, art. 24, par. 3, lett. a)**, Department of Mathematics, University of Salerno. Academic Recruitment Field 01/A5 – Numerical Analysis; Scientific Disciplinary Sector MAT/08 – Numerical Analysis.
- November 1, 2014–March 30, 2015 ■ **Fulbright Research Scholar**, School of Mathematics, Georgia Institute of Technology (Atlanta, USA).
- April 2, 2012–April 1, 2015 ■ **Research Fellow (Law 240/2010, art. 22)**, Department of Mathematics, University of Salerno. Scientific Disciplinary Sector MAT/08 (Numerical Analysis).
- July 1, 2010–June 30, 2011 ■ **Postdoctoral Fellow (Law 398/1989, art. 4)**, Department of Mathematics, University of Salerno.
- November 1, 2006–October 31, 2009 ■ **PhD Student in Mathematics** (VIII Cycle – New Series), University of Salerno, in joint supervision with Arizona State University.

Education

- March 19, 2010 ■ **PhD in Mathematics**, awarded by the University of Salerno and carried out under joint supervision with Arizona State University.
Dissertation title: *Highly stable multistage numerical methods for Functional Equations: Theory and Implementation Issues*
Advisors: *Beatrice Paternoster and Zdzislaw Jackiewicz.*
- September 19, 2006 ■ **Master's Degree in Mathematics**, awarded by the University of Salerno with final grade 110/110 *cum laude*.
Thesis title: *Two-step collocation methods for special classes of ordinary differential equations.*
Advisor: *Beatrice Paternoster.*
- November 17, 2004 ■ **Bachelor's Degree in Mathematics**, awarded by the University of Salerno with final grade 110/110 *cum laude*.
Thesis title: *Numerical methods for hyperbolic equations.*
Advisor: *Giovanni Capobianco.*

Awards and Honors

- 2015  **Honorary Member of the European Society of Computational Methods in Science and Engineering**, conferred during the international conference ICNAAM 2015 in Rhodes (Greece), where the undersigned was invited as a plenary speaker.
- 2014  **Fulbright Research Scholarship**, awarded by the U.S.-Italy Fulbright Commission for the academic year 2014–2015.
- 2011  **Galileo Galilei Prize 2011 – Young Researchers Section**, awarded by Rotary International and the Galileo Galilei Foundation of Pisa.
-  **Finalist, Cavalierato Giovanile Prize 2011**, Province of Salerno.

Grants and Project Management Responsibilities

- 2025  **INdAM Workshop Grant**, INdAM Headquarters, Rome, September 7–11, 2026.
Event title: *INdAM Workshop “Structure-preserving approximation of evolutionary problems and applications”*.
Co-organizers: *Beatrice Paternoster (University of Salerno), Gianluigi Rozza (SISSA, Trieste)*.
- 2024  **Principal Investigator, PRIN 2022 Project**, code 20229P2HEA (Decree no. 18490, October 8, 2024).
Project title: *Stochastic numerical modelling for sustainable innovation*.
Participating institutions: University of L’Aquila, University of Salerno, University of Udine.
- 2023  **PRIN-PNRR 2022 Project**, code P20228C2PP (Decree no. 1209, July 28, 2023), Unit Leader (L’Aquila).
Project title: *BAT-MEN (BATtery Modeling, Experiments & Numerics) – Enhancing battery lifetime: mathematical modeling, numerical simulations and AI parameter estimation techniques for the description and control of material localization processes*.
Participating institutions: University of L’Aquila, University of Salento, University of Salerno.
-  **University of Udine Project (DM 737, NextGenerationEU)**, CUP G25F21003390007, Unit Leader (L’Aquila).
Project title: *MONDI. Numerical Modeling and Data-driven Methods for Sustainable Innovation*.
Participating institutions: University of L’Aquila, University of Salerno, University of Udine.
- 2019  **Principal Investigator, PRIN 2017 Project**, code 2017JYCLSF (Decree February 14, 2019, prot. 240).
Project title: *Structure-preserving approximation of evolutionary problems*.
Participating institutions: Polytechnic University of Bari, University of L’Aquila, University of Salerno.
-  **GNCS-INdAM Project 2019**.
Project title: *Evolutionary problems and their discretization: issues of linear and nonlinear stability*.
Participating institutions: University of L’Aquila, Gran Sasso Science Institute, University of Bari Aldo Moro, Sapienza University of Rome, University of Salerno, University of Trieste, University of Udine.
- 2018  **GNCS-INdAM Project 2018**.
Project title: *Numerical approximation of evolutionary problems: deterministic and stochastic aspects*.
Participating institutions: University of L’Aquila, Gran Sasso Science Institute, University of Bari Aldo Moro, Sapienza University of Rome, University of Salerno, University of Trieste, University of Udine.
- 2014  **Fulbright Research Scholarship 2014–2015**.
Project title: *Discontinuous dynamical systems: an accurate and efficient framework for their numerical solution*.
Host institution: School of Mathematics, Georgia Institute of Technology (Atlanta, USA).

Grants and Project Management Responsibilities (continued)

- 2014 ■ **GNCS-INdAM Young Researchers Grant 2014.**
Project title: *Structure-preserving methods for evolutionary problems.*
- 2013 ■ **GNCS-INdAM Young Researchers Grant 2013.**
Project title: *Long-term integration of Hamiltonian systems and oscillatory problems.*
- 2012 ■ **GNCS-INdAM Young Researchers Grant 2012.**
- 2010 ■ **GNCS-INdAM Young Researchers Grant 2010.**
- 2009 ■ **GNCS-INdAM Young Researchers Grant 2009.**

Participation in Funded Projects

- 2025 ■ **GNCS-INdAM Project 2025.**
Project title: *Time integration of evolutionary problems with structure preservation.*
Project leader: Dajana Conte (University of Salerno).
- 2024–2025 ■ **European Union – NextGenerationEU, Ministry of University and Research.**
National Centre for HPC, Big Data and Quantum Computing (CN 00000013 – CUP: E13C22001000006).
- 2024 ■ **GNCS-INdAM Project 2024.**
Project title: *Numerical analysis of complex evolutionary problems: stability, conservation, and data-driven techniques.*
Project leader: Carmela Scalone (University of L'Aquila).
- 2023 ■ **GNCS-INdAM Project 2023.**
Project title: *Dynamical systems and evolutionary models: functional techniques, qualitative analysis, and numerical methods.*
Project leader: Fabio Vito Difonzo (University of Bari Aldo Moro).
- 2022 ■ **GNCS-INdAM Project 2022.**
Project title: *Advanced numerical methods for the analysis of dynamical systems.*
Project leader: Dimitri Breda (University of Udine).
- 2020 ■ **GNCS-INdAM Project 2020.**
Project title: *Numerical analysis of complex evolutionary systems.*
Project leader: Dimitri Breda (University of Udine).
- 2018–2025 ■ **RIA Fund (Research Projects of Institutional Interest), University of L'Aquila.**
Project leader: Francesco Leonetti (DISIM – University of L'Aquila).
- 2017 ■ **GNCS-INdAM Project 2017.**
Project title: *Analysis and development of numerical methodologies for certain non-classical types of dynamical systems.*
Project leader: Stefano Maset (University of Trieste).
- 2006–2016 ■ **FARB Project (University Funds for Basic Research), University of Salerno.**
Project leader: Beatrice Paternoster (University of Salerno).

Visiting Periods

- November–December 2025 ■ **Arizona State University, School of Mathematical and Statistical Sciences (Tempe, USA).**
Scientific collaboration with Zdzislaw Jackiewicz and Bruno Welfert.
Duration: 2 weeks.
- March and June 2025 ■ **MOX Laboratory, Politecnico di Milano.**
Scientific collaboration with Alessio Fumagalli and Anna Scotti.

Visiting Periods (continued)

- March 2025  **University of Naples Federico II, Department of Agriculture.**
Scientific collaboration with Francesco Giannino and Giovanni Pagano.
- April 2024  **University of Málaga** (Málaga, Spain).
Scientific collaboration with Maria López-Fernández.
Duration: 1 week.
- February 2023  **Getulio Vargas Foundation, School of Applied Mathematics** (Rio de Janeiro, Brazil).
Scientific collaboration with Hugo de La Cruz.
Duration: 2 weeks.
- October 2021  **University of Geneva, Section of Mathematics** (Geneva, Switzerland).
Scientific collaboration with Gilles Vilmart.
Duration: 1 week.
- October 2019  **Getulio Vargas Foundation, School of Applied Mathematics** (Rio de Janeiro, Brazil).
Scientific collaboration with Hugo de La Cruz.
Duration: 2 weeks.
- May 2017  **Arizona State University, School of Mathematical and Statistical Sciences** (Tempe, USA).
Scientific collaboration with Zdzislaw Jackiewicz.
Duration: 2 weeks.
- February, March, July 2016  **MOX Laboratory, Politecnico di Milano.**
Scientific collaboration with Anna Scotti.
- November 2014–March 2015  **Georgia Institute of Technology, School of Mathematics** (Atlanta, USA).
Scientific collaboration with Luca Dieci within the Fulbright Program.
Duration: 5 months.
- March–April 2014  **Johannes Kepler University Linz, Institute for Stochastics** (Linz, Austria).
Scientific collaboration with Evelyn Buckwar.
Duration: 1 month.
- April–May 2013  **University of Geneva, Section of Mathematics** (Geneva, Switzerland).
Scientific collaboration with Ernst Hairer.
Duration: 2 months.
- January 2013  **University of Auckland, Department of Mathematics** (Auckland, New Zealand).
Scientific collaboration with John C. Butcher.
Duration: 1 month.
- October–December 2010  **University of Auckland, Department of Mathematics** (Auckland, New Zealand).
Scientific collaboration with John C. Butcher.
Duration: 2 months.
- March 2008–March 2009  **Arizona State University, School of Mathematical and Statistical Sciences** (Tempe, USA).
Scientific collaboration with Zdzislaw Jackiewicz, within a joint PhD program.
Duration: 1 year.

Scientific Publications

An up-to-date list of scientific publications is available at the following webpage:
<https://sites.google.com/view/raffaeledambrosio/publications>.

Editorial Activities

- since January 2024 📌 Associate Editor, *Journal of Computational and Applied Mathematics* (Elsevier).
- since February 2016 📌 Associate Editor, *Applied Numerical Mathematics* (Elsevier).
- since November 2015 📌 Specialist Editor, *Computer Physics Communications* (Elsevier).
- from February 2019 to May 2023 📌 Reviewing Editor, *Experimental Results* (Cambridge University Press).
- from November 2014 to September 2025 📌 Associate Editor, *Opuscula Mathematica* (AGH University of Science and Technology, Kraków).

Conference and Workshop Organizing Committees

- 2026 📌 **INdAM Workshop “Structure-preserving approximation of evolutionary problems and applications”**, Rome, September 7–11, 2026.
Co-organizers: Beatrice Paternoster (University of Salerno), Gianluigi Rozza (SISSA, Trieste). **Minisimposio “MS60: Numerical modeling for deterministic and stochastic dynamical systems” within SciCADE 2026 - International Conference on Scientific Computation and Differential Equations** Edinburgh, June 29–July 3, 2026.
Co-organizzatori: D. Conte (Università degli Studi di Salerno), Hugo de la Cruz (Fundação Getulio Vargas, Rio de Janeiro).
- 📌 **Member of the Scientific Committee of the “III Meeting UMI for Doctoral Students**, Florence, June 29, July 1 2026.
- 2025 📌 **Minisymposium “Numerical Modeling for Sustainability” within SIMAI Congress 2025**, Trieste, September 1–5, 2025.
Co-organizers: Dimitri Breda (University of Udine) and Dajana Conte (University of Salerno).
- 📌 **DESTINY Group Meeting “Stochastic Numerical Modelling for Sustainable Innovation” within the activities of the PRIN 2022 project**, L’Aquila, July 24–25, 2025.
Co-organizers: Stefano Di Giovacchino and Carmela Scalone (University of L’Aquila).
- 📌 **Invited Session “Advanced models and methods to enhance sustainability” within the thematic conference ECCOMAS Math 2 Product (M2P) – Emerging Technologies in Computational Science for Industry, Sustainability and Innovation**, Valencia (Spain), June 4–6, 2025.
Co-organizers: Dajana Conte (University of Salerno), Susanna Mirabella, Simona Perotto, Giacomo Speroni (Politecnico di Milano).
- 📌 **Minisymposium “Mathematical modeling, numerical simulations and AI techniques to enhance battery lifetime” within the 3rd IACM Digital Twins in Engineering Conference (DTE 2025) & 1st ECCOMAS Artificial Intelligence and Computational Methods in Applied Science (AICOMAS 2025)**, Paris, February 17–21, 2025.
Co-organizers: Dajana Conte (University of Salerno) and Ivonne Sgura (University of Salento).
- 2024 📌 **Special Session “Recent Advances in Numerics for Deterministic and Stochastic Dynamical Systems” within the AMS–UMI Joint Meeting 2024**, Palermo, July 23–26, 2024.
Co-organizer: Xiaoying Han (Auburn University).

Conference and Workshop Organizing Committees (continued)

- 2023 **■** **Session “Dynamical systems and numerical methods for differential equations” within UMI Congress 2023**, by invitation, Pisa, September 4–9, 2023.
Co-organizer: Rossana Vermiglio (University of Udine).
- **Invited Session “Numerical modelling for sustainable innovation” within the international conference ECCOMAS Math 2 Product (M2P) – Emerging Technologies in Computational Science for Industry, Sustainability and Innovation**, Taormina, May 30–June 1, 2023.
Co-organizers: Dimitri Breda (University of Udine) and Dajana Conte (University of Salerno).
- 2022 **■** **Minisymposium “Numerical approximation of stochastic problems” within SciCADE 2021 – International Conference on Scientific Computation and Differential Equations**, by invitation, Reykjavík, July 25–29, 2022.
Co-organizer: Hugo de la Cruz (Getulio Vargas Foundation, Rio de Janeiro).
- 2021 **■** **Minisymposium “Non-standard time integration of evolutionary problems” within SIMAI Congress 2020+21**, Parma, August 30–September 3, 2021.
Co-organizers: Dajana Conte (University of Salerno) and Marina Popolizio (Politecnico di Bari).
- 2020–2021 **■** **Online seminar series NEPA2020 “Numerics for evolutionary problems and applications”**, December 2020–May 2021.
Co-organizers: Dajana Conte (University of Salerno), Hugo de la Cruz (Getulio Vargas Foundation, Rio de Janeiro), Beatrice Paternoster (University of Salerno), Helmut Podhaisky (Martin Luther University Halle-Wittenberg).
- 2020 **■** **Summer School “Numerical approximation of stochastic differential equations” (Lecturers: E. Buckwar, D. Cohen, D. Higham)**, University of Salerno, July 14–17, 2020. The event was co-funded by the European Mathematical Society and postponed due to the COVID-19 emergency.
Co-organizers: Dajana Conte (University of Salerno), Beatrice Paternoster (University of Salerno).
- **Workshop STRUCTAPP2020 “A two-day workshop on structure-preserving approximation of evolutionary problems and applications”**, L’Aquila, January 23–24, 2020.
Co-organizers: Stefano Di Giovacchino, Carmela Scalone (University of L’Aquila).
- 2019 **■** **Minisymposium “Numerical approximation of stochastic systems” within SciCADE 2019 – International Conference on Scientific Computation and Differential Equations**, Innsbruck, July 22–26, 2019.
Co-organizer: Hugo de la Cruz (Getulio Vargas Foundation, Rio de Janeiro).
- **Minisymposium “Numerical approximation of stochastic problems” within ICIAM 2019 – International Conference on Industrial and Applied Mathematics**, Valencia, July 15–19, 2019.
Co-organizer: Hugo de la Cruz (Getulio Vargas Foundation, Rio de Janeiro).
- **HA-LU 2019 Conference in honor of the 70th birthday of Ernst Hairer and the 60th birthday of Christian Lubich**, L’Aquila, June 17–21, 2019.
Co-organizers: Nicola Guglielmi (Gran Sasso Science Institute, L’Aquila), Maria López-Fernández (Sapienza University of Rome), Piero Marcati (Gran Sasso Science Institute, L’Aquila).
- 2018 **■** **Minisymposium “Recent advances in numerical modeling for differential problems” within the UMI–SIMAI–PTM International Mathematical Meeting 2018**, Wrocław, September 17–20, 2018.
Co-organizer: Zbigniew Bartoszewski (Gdańsk University of Technology).

Conference and Workshop Organizing Committees (continued)

- 2018 ■ **Minisymposium “Non-standard time integration of evolutionary problems” within SIMAI 2018 Congress**, Rome, July 2–6, 2018.
Co-organizer: Maria López-Fernández (Sapienza University of Rome).
- 2017 ■ **Minisymposium “Numerical treatment of oscillatory problems” within SciCADE 2017 – International Conference on Scientific Computation and Differential Equations**, Bath, September 11–15, 2017.
Co-organizers: Juan I. Montijano, Luis Rández (University of Zaragoza).
- **Special Session “Integradores temporales de ecuaciones diferenciales” within the Biennial Congress of the Royal Spanish Mathematical Society**, Zaragoza, January 30–February 3, 2017.
Co-organizers: Inmaculada Higuera (University of Navarra) and Severiano González-Pinto (University of La Laguna).
- 2015 ■ **Workshop NUMEP2015 – “Numerical modeling of evolutionary problems: perspectives and applications”**, University of Salerno, October 26–27, 2015.
Co-organizers: Angelamaria Cardone, Dajana Conte, Beatrice Paternoster (University of Salerno).

Supervision Activities

PhD Students

- Supervisor of Dr. Simone Di Donato (PhD in Mathematics and Models, University of L'Aquila), XLI Cycle;
- Supervisor of Dr. Helena Biscevic (PhD in Mathematics, Gran Sasso Science Institute), since academic year 2021–22;
- Supervisor of Dr. Stefano Di Giovacchino (PhD in Mathematics and Models, University of L'Aquila), XXXIV Cycle, from November 1, 2018 to March 7, 2022. PhD thesis entitled “*Structure-preserving numerical approximation of stochastic evolution problems*”, defended on June 23, 2022;
- Tutor of Dr. Ivan Gallo (PhD in Mathematics and Models, University of L'Aquila), XXXV Cycle. PhD thesis entitled “*Evaluation of Non-linear Credit Value Adjustments under multiple credit risks*”, defended on July 25, 2023;
- Tutor of Dr. Alessandro Di Pasquale (PhD in Mathematics and Models, University of L'Aquila), XXXV Cycle, from November 1, 2019 to December 16, 2020;
- Co-supervisor of the PhD thesis by Giuseppe De Martino, “*Multi-value numerical modeling for special differential problems*”, Doctoral School in Mathematical, Physical and Natural Sciences – XIII Cycle, University of Salerno (2015);
- Co-supervisor of the PhD thesis by Martina Moccaldi, PhD Program in Mathematics, Physics and Applications, University of Salerno – University of Campania “Luigi Vanvitelli” (2018).

Postdoctoral Researchers

- Supervisor of the postdoctoral research fellowship of Dr. Stefano Di Giovacchino (University of L'Aquila), since November 1, 2022;
- Supervisor of the postdoctoral research fellowship of Dr. Afsaneh Moradi (University of L'Aquila), from May 1, 2022 to April 30, 2023;
- Supervisor of the postdoctoral research fellowship of Dr. Carmela Scalone (University of L'Aquila), from July 1, 2019 to February 2, 2022.

Bachelor's and Master's Theses

The undersigned has served as thesis advisor for Bachelor's and Master's theses in Mathematics, Mathematical Engineering, Mathematical Modelling, and Computer Science, including within international double-degree or joint-degree programs. An up-to-date list is available at the following webpage: <https://sites.google.com/view/raffaeledambrosio/former-students>.

Teaching Activities

Courses Taught within Bachelor's and Master's Degree Programs

At the University of L'Aquila:

- *Numerical Analysis*, Bachelor's Degree in Mathematics (since academic year 2018–19, 6 ECTS);
- *Numerical Methods for Differential Equations* (sometimes cross-listed as *Advanced Numerical Analysis*), Master's Degree in Mathematics/Mathematical Engineering (6 ECTS from A.Y. 2017–18 to A.Y. 2021–22; 3 ECTS in A.Y. 2022–23 and 2023–24; 4.5 ECTS since A.Y. 2024–25);
- *Introduction to Scientific Computing*, Pre-Master's Foundation Programme (PMFP) in Applied Mathematics (since A.Y. 2024–25, 36 hours);
- *Computational Methods in Epidemiology*, Master's Degree in Mathematical Modelling (6 ECTS in A.Y. 2022–23, 3 ECTS in A.Y. 2023–24);
- *High Performance Computing and Applications to Differential Equations*, Master's Degree in Mathematical Engineering (6 ECTS, A.Y. 2018–19);
- *Numerical Methods for Linear Algebra and Optimisation*, Master's Degree in Mathematical Engineering (6 ECTS from A.Y. 2017–18 to A.Y. 2019–20; 3 ECTS in A.Y. 2020–21);
- *Numerical Methods for PDEs* (sometimes cross-listed as *Advanced Numerical Analysis*), Master's Degree in Mathematics/Mathematical Engineering (3 ECTS, A.Y. 2024–25);
- *Numerical Methods for Stochastic Modelling* (sometimes cross-listed as *Advanced Numerical Analysis*), Master's Degree in Mathematics/Mathematical Engineering (3 ECTS since A.Y. 2021–22).

At the University of Salerno:

- *Numerical Analysis*, Bachelor's Degree in Computer Science (6 ECTS, A.Y. 2015–16);
- *Scientific Computing*, Bachelor's Degree in Computer Science (6 ECTS, A.Y. 2016–17);
- *Numerical Calculus II*, Bachelor's Degree in Mathematics (2 ECTS in A.Y. 2016–17; 1 ECTS in A.Y. 2015–16).

Teaching Activities within Doctoral Schools

- *Introduction to the Finite Element Method for Partial Differential Equations*, PhD Program in Mathematics and Models, University of L'Aquila, January–February 2023 (10 hours);
- *Numerical Solution of Stochastic Differential Equations*, University of Udine, November 2022 (10 hours);
- *Numerics for Stochastic Differential Equations*, Gran Sasso Science Institute, March–April 2022 (12 hours);
- *Introduction to the Finite Element Method for Partial Differential Equations*, PhD Program in Mathematics and Models, University of L'Aquila, January–February 2022 (12 hours);
- *Numerics for Stochastic Differential Equations*, Gran Sasso Science Institute, April 2021 (10 hours);

- *Numerics for Stochastic Differential Equations*, PhD Program in Mathematics and Models, University of L'Aquila, February 2021 (10 hours);
- *Numerical Methods for Differential Equations*, Graduate School of the University of Udine, M.A.Y. 2020 (10 hours);
- *Advanced Numerical Analysis*, PhD Program in Mathematics and Models, University of L'Aquila, January 2020 (6 hours);
- *Numerics for Stochastic ODEs*, Gran Sasso Science Institute, February 2019 (10 hours);
- *Numerical Linear Algebra and Applications*, PhD Program in Mathematics, Physics and Applications, University of Salerno, A.Y. 2016–17 (20 hours);
- *Numerical Methods of Geometric Integration for Hamiltonian Problems*, PhD Program in Mathematics, Physics and Applications, University of Salerno – Second University of Naples, A.Y. 2015–16 (20 hours);
- *Numerical Integration of Stochastic Differential Equations*, PhD Program in Mathematics, Physics and Applications, University of Salerno – Second University of Naples, A.Y. 2014–15 (20 hours).

Invited Talks at National and International Conferences and Workshops

- *Geometric numerical integration of S(P)DEs*, Meeting Campano di Analisi Numerica, University of Naples Federico II, February 26, 2026.
- *Geometric numerical integration of S(P)DEs*, Advanced Numerical Methods for Parametric PDEs, Gran Sasso Science Institute, February 11–13, 2026.
- *Stochastic Geometric Numerical Integration in a Nutshell*, Numerical Solutions to (S)PDEs with Complex Geometries, Thessaloniki, December 17–19, 2025.
- *Geometric numerical integration meets stochastic numerics*, ENUMATH 2025 – European Conference on Numerical Mathematics and Advanced Applications, within the Minisymposium “New Perspectives in Geometric Numerical Integration and Beyond”, Heidelberg, September 1–5, 2025.
- *Principles of Stochastic Geometric Integration in Action*, SIMAI Congress 2025, within the Minisymposium “Numerical and Analytical Approximation of Data and Functions with Applications”, Trieste, September 1–5, 2025.
- *Geometric numerical integration meets stochastic numerics*, SDIDE 2025 – 7th Workshop on Stability and Discretization Issues in Differential Equations, Fisciano (Italy), June 16–20, 2025.
- *Time integration of evolutionary problems: so far and beyond*, NAMATH Workshop “Numerical Analysis: Models, Applications, and Theory”, Bari, June 5–6, 2025.
- *Stochastic numerics for sustainability*, Third Meeting of the ANA&A Activity Group – SIMAI, Salerno, May 15–16, 2025.
- *Numerical issues in Turing pattern formation for stochastic PDEs*, International Workshop on Numerical Analysis of Integral Equations, Shenzhen (China), April 28–30, 2025.
- *Stochastic numerics for sustainable innovation*, DSABNS – 16th Dynamical Systems Applied to Biology and Natural Sciences, within the Minisymposium “Evolutionary Numerical Models with Applications”, Naples, January 20–24, 2025.
- *Geometric numerical integration of stochastic evolutionary problems*, A Day of Applied Mathematics, Gran Sasso Science Institute, September 20, 2024.

- *Geometric numerical integration meets stochastic numerics*, ICNAAM 2024 – 22nd International Conference on Numerical Analysis and Applied Mathematics in honor of Prof. Desmond Higham, Heraklion, Crete (Greece), September 11–17, 2024, plenary speaker.
- *Principles of geometric numerical integration for stochastic differential equations*, NUMDIFF-17 – Conference on the Numerical Solution of Differential and Differential-Algebraic Equations, Halle (Germany), September 9–13, 2024, plenary speaker.
- *Stochastic numerics for sustainability*, ECCOMAS 2024, Keynote Speaker, MS178 – Numerical Modeling and Data Analysis for Advancing Sustainable Innovation, Lisbon (Portugal), June 3–7, 2024.
- *Numerical preservation principles for stochastic dynamical systems*, Biennial Congress of the Royal Spanish Mathematical Society, Special Session 13 – Advanced Methods for Differential Problems and Their Applications, Pamplona (Spain), January 24–26, 2024.
- *Mathematics of misinformation*, Numerical Methods and New Technologies for Cultural Heritage, Philology and Industry 4.0, University of Salerno, May 5, 2023.
- *Structure preservation in stochastic numerics*, Geometric Methods and Stochastic Reduction for Fluid Models, Gran Sasso Science Institute, September 14–17, 2022, keynote speaker.
- *Destabilising nonnormal stochastic differential equations*, SciCADE 2021, Invited Symposium MS-o8 “Numerical Methods for Stochastic (Partial) Differential Equations”, Reykjavík (Iceland), July 25–29, 2022. The co-author C. Scalone delivered the talk on my behalf.
- *Principles of stochastic numerics and applications to dynamical systems*, SDS2022 Workshop on Structural Dynamical Systems: Computational Aspects, Rosa Marina (Brindisi), June 7–10, 2022, plenary minicourse (4 hours).
- *Structure-preserving numerical integration of stochastic dynamical systems*, GNCS Project 2020 Study Day, December 21, 2021 (online), by invitation of the project coordinator, Prof. D. Breda (University of Udine).
- *Principles of stochastic geometric numerical integration*, INdAM Day “Mathematical Research Today in Salerno” in memory of Prof. Mariella Transirico, Fisciano (Italy), December 6–7, 2021.
- *Principles of Stochastic Geometric Numerical Integration: Dissipative Problems and Stochastic Oscillators*, invited plenary talk at ICNAAM 2021 – 19th International Conference on Numerical Analysis and Applied Mathematics, Rhodes (Greece), September 20–26, 2021.
- Invited plenary speaker at SDIDE 2021 – 6th Workshop on Stability and Discretization Issues in Differential Equations, Budapest, June 7–11, 2021. The event was postponed to 2022 due to the COVID-19 emergency; for the 2022 edition, the invitation was declined due to conflicting commitments.
- Invited plenary speaker at SDIDE 2020 – 6th Workshop on Stability and Discretization Issues in Differential Equations, Budapest, June 8–12, 2020. The event was postponed to 2021 due to the COVID-19 emergency.
- Invited plenary speaker at ICNAAM 2020 – 18th International Conference on Numerical Analysis and Applied Mathematics, Symposium “13th Symposium on Recent Trends in the Numerical Solution of Differential Equations”, Rhodes (Greece), September 17–23, 2020. The in-person event was postponed to 2021 due to the COVID-19 emergency. Within the online edition, the author delivered the talk entitled “*Stiffness ratio and the diffusion of fake news*”.
- *Principles of Stochastic Geometric Numerical Integration*, International Webinar on Applied Mathematics and Modelling, September 24, 2020.

- *Decision and uncertainty: numerical mathematics you did not know you were using*, Mathematics and Science in High Schools, Salerno, March 5–6, 2020, by invitation of the Scientific Committee. The event was cancelled due to the COVID-19 emergency.
- *A journey through deterministic and stochastic structure-preserving numerical schemes*, GNIDE 2019 – Geometric Numerical Integration of Differential Equations, Beijing (China), September 9–13, 2019. The author was unable to attend; the talk was delivered by co-author D. Cohen.
- *Nonlinear stability of stochastic multistep methods*, UMI Congress 2019, Session S-10 “Dynamical Systems and Numerical Methods for Differential Equations”, by invitation of N. Guglielmi and L. Lopez, Pavia, September 2–7, 2019.
- *Long-term analysis of time discretizations for stochastic Hamiltonian problems*, ICIAM 2019 Conference, Symposium MS-06 “Efficient time-stepping methods for differential problems with special features”, July 15–19, 2019.
- *Adapted discretization of partial differential equations generating periodic wavefronts*, plenary talk at the conference Efficient High-Order Time Discretization Methods for PDEs, Anacapri, May 8–10, 2019.
- *A journey through structure-preserving discretization*, plenary talk at ICRAAM 2019 – International Conference on Recent Advances in Applied Mathematics, Lahore (Pakistan), February 20–22, 2019.
- *Hidden structures of stochastic numerical methods*, plenary talk at “Scientific Computing and Mathematical Models: Searching for Hidden Structures through Manifest Phenomena 2.0”, Como, May 16–18, 2018.
- *Invariant-preserving numerical approximation of stochastic differential equations*, RO-LCG 2017 – Grid, Cloud and High-Performance Computing in Science, Symposium “Numerical Analysis and Applications”, Sinaia, October 26–28, 2017.
- *An IVP solver for systems with discontinuous right-hand sides, with sliding motion on co-dimension 2 surfaces and approximation of periodic orbits*, SciCADE 2017, Symposium MS-31 “Dynamical Systems with Discontinuities”, Bath, September 11–15, 2017.
- *Preserving structures of stochastic differential equations along numerical solutions*, Biennial Congress of the Royal Spanish Mathematical Society, Special Session S15 – Temporal Integrators for Differential Equations, Zaragoza (Spain), January 30–February 3, 2017.
- *On the numerical treatment of selected oscillatory evolutionary problems*, ICNAAM 2016 – 16th International Conference on Numerical Analysis and Applied Mathematics, Symposium “Ninth Symposium on Recent Trends in the Numerical Solution of Differential Equations”, September 19–25, 2016.
- *Numerical treatment of reaction–diffusion problems with discontinuous forcing terms*, XIII SIMAI Conference, Symposium MS-27 “Dynamical Systems with Discontinuities: Theory, Numerical Methods and Applications”, Milan, September 13–16, 2016.
- *Structure-preserving numerical integration of evolutionary problems*, plenary talk at SDIDE 2016 – Stability and Discretization Issues in Differential Equations, Trieste, June 21–24, 2016.
- *Recent advances in numerical modeling for differential problems*, plenary talk at Soft Computing Days, Fisciano, May 23–25, 2016.
- *Some recent advances in the numerical solution of differential equations*, plenary talk at ICNAAM 2015 – 13th International Conference on Numerical Analysis and Applied Mathematics, Rhodes (Greece), September 22–28, 2015.
- *Numerical treatment of discontinuous dynamical systems generating periodic orbits*, SciCADE 2015, Symposium MS07 “Discontinuous Dynamical Systems: Theory and Numerical Methods”, Potsdam (Germany), September 14–18, 2015.

- *On the numerical treatment of piecewise-regular dynamical systems*, XX UMI Conference, Symposium S10 “Numerical Methods for Ordinary Differential Equations”, Siena, September 7–12, 2015.
- *Structure-preserving numerical methods for evolutionary problems*, plenary talk at the Second Tbilisi–Salerno Conference on Modeling in Mathematics, Tbilisi (Georgia), March 15–18, 2015.
- *Highly stable multivalued numerical methods*, ICNAAM 2014 – 12th International Conference on Numerical Analysis and Applied Mathematics, Symposium “Seventh Symposium on Recent Trends in the Numerical Solution of Differential Equations”, September 22–28, 2014.
- *Long-term stability of multivalued methods for Hamiltonian problems*, ICNAAM 2014 – 12th International Conference on Numerical Analysis and Applied Mathematics, Symposium “Structure-Preserving Integrators for Differential Equations”, Rhodes (Greece), September 22–28, 2014.
- *Diagonally implicit exponentially fitted Runge–Kutta methods with equation-dependent coefficients*, ICNAAM 2012 – 10th International Conference on Numerical Analysis and Applied Mathematics, Symposium “Numerical Methods and Computational Procedures for Special Problems in Physics and Chemistry”, Kos (Greece), September 19–25, 2012.
- *P-stable Nordsieck general linear methods for second-order ordinary differential equations*, ICNAAM 2012 – 10th International Conference on Numerical Analysis and Applied Mathematics, Symposium “Fifth Symposium on Recent Trends in the Numerical Solution of Differential Equations”, Kos (Greece), September 19–25, 2012.
- *Numerical modeling of some evolutionary problems in immunology*, plenary talk at the First Salerno–Tbilisi Conference on Modeling in Mathematics, University of Salerno, February 25–27, 2012.


Seminars at Universities in Italy and Abroad

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| May 29, 2025 | 📌 University of Naples Federico II , invited by Francesco Giannino.
Seminar title: “ <i>Stochastic numerics for sustainability</i> ”. |
| March 21, 2025 | 📌 Politecnico di Milano , invited by Luca Formaggia.
Seminar title: “ <i>Structure-preserving numerical methods for stochastic differential equations</i> ”. |
| November 15, 2024 | 📌 University of Neuchâtel , invited by Jung Kyu Ganci.
Seminar title: “ <i>Stochastic numerics in a nutshell</i> ”. |
| April 25, 2024 | 📌 University of Málaga , invited by Maria López-Fernández.
Seminar title: “ <i>Principles of geometric numerical integration</i> ”. |
| June 29, 2023 | 📌 University of Salerno , invited by Raffaele Cerulli.
Seminar title: “ <i>From continuous to discrete, from discrete to networks</i> ”. |
| June 12, 2023 | 📌 University of Campania “Luigi Vanvitelli” , invited by Gerardo Toraldo.
Seminar title: “ <i>Principles of stochastic geometric numerical integration</i> ”. |
| October 5, 2021 | 📌 University of Geneva, Section of Mathematics , invited by Gilles Vilmart.
Seminar title: “ <i>Numerical conservation issues for stochastic differential equations</i> ”. |
| July 6, 2021 | 📌 University of Naples Federico II, SNAP – Seminar Series on Numerics and Applications (online), invited by Daniela Di Serafino.
Seminar title: “ <i>Principles of stochastic geometric numerical integration</i> ”. |
| June 10, 2021 | 📌 Ghana Numerical Analysis (online), invited by Stephen Moore.
Seminar title: “ <i>Principles of Deterministic and Stochastic Geometric Numerical Integration</i> ”. |

Seminars at Universities in Italy and Abroad (continued)

- May 3, 2021  **University of Udine** (online), within the CDLab event “Italy meets Switzerland @CDLab: dynamical systems, stochastic differential equations and applications”, invited by Dimitri Breda.
Seminar title: “*Principles of stochastic geometric numerical integration*”.
- November 17, 2020  **University of Twente** (online), invited by Paolo Cifani.
Seminar title: “*Structure-preserving numerics for stochastic Hamiltonian problems*”.
- November 4, 2020  **Gran Sasso Science Institute** (online), invited by Nicola Guglielmi and Francesco Tudisco.
Seminar title: “*Structure-preserving numerics for stochastic differential equations*”.
- September 3, 2020  **University of Udine** (online), invited by Dimitri Breda and Rossana Vermiglio.
Seminar title: “*Geometric numerical integration of stochastic differential problems*”.
- December 5, 2017  **Sapienza University of Rome, Department of Mathematics**, invited by Maria López-Fernández.
Seminar title: “*Recent advances in structure-preserving numerical integration of differential problems: deterministic and stochastic aspects*”.
- May 11, 2017  **Arizona State University, School of Mathematical and Statistical Sciences**, invited by Zdzislaw Jackiewicz.
Seminar title: “*Preserving structures of stochastic differential equations along numerical solutions*”.
- December 17, 2015  **Politecnico di Milano, Department of Mathematics**, invited by Luca Formaggia.
Seminar title: “*Structure-preserving numerical integration of evolutionary problems*”.
- January 26, 2015  **Georgia Institute of Technology, School of Mathematics**, invited by Luca Dieci.
Seminar title: “*Nonlinear stability issues for the numerical solution of evolutionary problems*”.
- December 1, 2014  **Georgia Institute of Technology, School of Mathematics**, invited by Luca Dieci.
Seminar title: “*Structure-preserving numerical integration of ordinary and partial differential equations*”.
- April 9, 2013  **University of Geneva, Section of Mathematics**, invited by Ernst Hairer.
Seminar title: “*Nearly conservative general linear methods for Hamiltonian problems*”.
- January 25, 2013  **University of Auckland, Department of Mathematics**, invited by John C. Butcher.
Seminar title: “*Partitioned general linear methods for separable Hamiltonian problems*”.
- November 9, 2010  **University of Auckland, Department of Mathematics**, invited by John C. Butcher.
Seminar title: “*Time-reversal symmetry of partitioned general linear methods*”.
- February 14, 2011  **University of Naples Federico II, Department of Mathematics and Applications “Renato Caccioppoli”**, invited by Elvira Russo.
Seminar title: “*Conservative properties of General Linear Methods*”.
- November 2, 2010  **University of Auckland, Department of Mathematics**, invited by John C. Butcher.
Seminar title: “*G-symplectic General Linear Methods for separable Hamiltonian problems*”.

Seminars at Universities in Italy and Abroad (continued)

November 4, 2008  **Arizona State University, School of Mathematical and Statistical Sciences**, invited by Zdzislaw Jackiewicz.
Seminar title: “*Continuous two-step Runge–Kutta methods for ordinary differential equations*”.

Contributed Talks at National and International Conferences and Workshops

Since 2007, the undersigned has delivered contributed talks at the following national and international scientific events:

- 2nd BAT-MEN Workshop, January 16, 2026 (remote participation);
- ICCSA 2025 – The 25th International Conference on Computational Science and Its Applications, Istanbul, June 30–July 3, 2025 (remote participation);
- 3rd IACM Digital Twins in Engineering Conference (DTE 2025) & 1st ECCOMAS Artificial Intelligence and Computational Methods in Applied Science (AICOMAS 2025), Paris, February 17–21, 2025;
- AMS–UMI Joint Meeting, Palermo, July 23–26, 2024;
- BAT-MEN Meeting – University of Salento, Lecce, July 15–16, 2024;
- M2P – Math 2 Product: Emerging Technologies in Computational Science for Industry, Sustainability and Innovation, Taormina, May 30–June 1, 2023;
- Trends on Dissipativity in Systems and Controls, Brig (Switzerland), May 23–25, 2022;
- 4th International Conference on Mathematical Models and Computational Techniques in Science and Engineering, London, February 22–23, 2020;
- SciCADE 2019 – International Conference on Scientific Computation and Differential Equations, Innsbruck (Austria), July 22–26, 2019;
- NSIDE 2019 – Workshop on Numerical Solution of Integral and Differential Equations, Gdańsk (Poland), July 17–19, 2019;
- ICIAM 2019 Conference, Symposium MS-06 “Numerical Approximation of Stochastic Problems”, Valencia (Spain), July 15–19, 2019;
- SDS 2018 – Workshop on Structural Dynamical Systems: Computational Aspects, Capitolo–Monopoli (Bari), June 12–15, 2018;
- WIVACE 2017 – XII Workshop on Artificial Life and Evolutionary Computation, Venice, September 19–21, 2017;
- 9th NAI Workshop – Numerical Analysis of Evolution Equations, Innsbruck (Austria), November 8–11, 2016;
- SDS 2016 – Workshop on Structural Dynamical Systems: Computational Aspects, Capitolo–Monopoli (Bari), June 14–17, 2016;
- NUMEP 2015 – Numerical Modeling in Evolutionary Problems: Perspectives and Applications, Fisciano (SA), October 26–27, 2015;
- IWANASP 2015 – Fifth International Workshop on Analysis and Numerical Approximation of Singular Problems, Lagos (Portugal), October 22–24, 2015;
- Graduate School on Evolution Equations, Maxwell Institute, Edinburgh (UK), October 8–10, 2014;

- NUMDIFF 2014 – Numerical Solution of Differential and Differential-Algebraic Equations, Halle (Germany), September 7–11, 2014;
- SIMAI Biennial Congress, Taormina (Italy), July 7–10, 2014;
- 10th AIMS Conference on Dynamical Systems, Differential Equations and Applications, Madrid (Spain), July 7–11, 2014;
- NETNA 2015 – New Trends in Numerical Analysis, Falerna (Italy), June 18–21, 2015;
- 8th SDS Workshop – Structural Dynamical Systems: Computational Aspects, Capitolo–Monopoli (Italy), June 12–15, 2014;
- SciCADE 2013 – International Conference on Scientific Computation and Differential Equations, Valladolid (Spain), September 16–20, 2013;
- ENUMATH 2013 – European Numerical Mathematics and Advanced Applications, Lausanne (Switzerland), August 26–30, 2013;
- ANODE 2013 – Auckland Numerical Ordinary Differential Equations, in celebration of the 80th birthday of John C. Butcher, Auckland (New Zealand), January 7–11, 2013;
- 7th SDS Workshop – Structural Dynamical Systems: Computational Aspects, Capitolo–Monopoli (Bari), June 12–15, 2012;
- SIMAI Biennial Congress, Turin, June 25–28, 2012;
- ICCAM 2012 – International Congress on Computational and Applied Mathematics, Ghent (Belgium), July 9–13, 2012;
- 13th NUMDIFF Seminar on Numerical Solution of Differential and Differential-Algebraic Equations, Halle (Germany), September 10–14, 2012;
- SIMAI Study Day “Perspectives for the Development of Applied Mathematics in Italy 2011”, Rome, April 8, 2011;
- CIME Course “Current Challenges in Stability Issues for Numerical Differential Equations”, Cetraro (Italy), organized by L. Dieci and N. Guglielmi, June 27–July 2, 2011;
- MMA 2011 – 16th International Conference on Mathematical Modelling and Analysis, Sigulda (Latvia), May 25–28, 2011;
- XIX UMI Conference, Bologna, September 12–17, 2011;
- SC 2011 – International Conference on Scientific Computing, Santa Margherita di Pula (Italy), October 10–14, 2011;
- BIT 50 – Trends in Numerical Computing, Lund (Sweden), June 17–20, 2010;
- 12th NUMDIFF Seminar on Numerical Solution of Differential and Differential-Algebraic Equations, Halle (Germany), September 14–18, 2009;
- ICNAAM 2009 – 7th International Conference on Numerical Analysis and Applied Mathematics, Rethymno, Crete (Greece), September 18–22, 2009;
- ICCAM 2009 – 14th International Congress on Computational and Applied Mathematics, Antalya (Turkey), September 29–October 2, 2009;
- SDS 2008 – Structural Dynamical Systems: Computational Aspects Workshop, Capitolo–Monopoli, June 17–20, 2008;
- GLADE Conference and Workshop 2008, Auckland (New Zealand), July 14–25, 2008;

- SIMAI 9th Congress, Rome, September 15–19, 2008.

Service Activities

- Member of the Scientific Council of the National Group for Scientific Computing (GNCS), INdAM, since September 19, 2025.
- Member of the Scientific Committee of the Italian Mathematical Union (UMI) since June 1, 2024, with coordinating responsibilities for the UMI Statute and Regulations Committee.
- Member of the Resource Planning Committee of DISIM since 2024.
- Quality Assurance Officer of DISIM since November 28, 2025.
- Scientific coordinator of UnivAQ on Air, podcast of the University of L'Aquila, since 2025.
- Member of the Orientation and School Relations Committee of DISIM from January 29, 2025 to September 30, 2025.
- Chair of the Teaching Area Council of the Bachelor's Degree in Mathematical Engineering, University of L'Aquila, from September 27, 2021 to September 30, 2024 (Rectoral Decree Prot. no. 3385 of September 27, 2021 and Rep. 453/2021 Prot. no. 4154 of November 12, 2021).
- Member of the pool of eligible evaluators for the national committees for the Italian National Scientific Qualification (ASN), 2023–2025 cycle, Academic Recruitment Field 01/A5 (Numerical Analysis).
- Member of the InterMaths–MathMods–RealMaths Internal Quality Assurance Board since October 28, 2022.
- Reviewer for the Italian Research Assessment Exercise (VQR) 2015–2019.
- Vice-Chair of the Teaching Area Council of the Bachelor's Degree in Mathematical Engineering, University of L'Aquila, since November 6, 2018. From January 25, 2020 to August 31, 2020, the author served as Acting Chair of the Teaching Area Council, replacing the Chair during official leave.
- Delegate of the Director of DISIM for seminar activities and cultural initiatives since June 22, 2021 (Director's Decree 218/2021, Prot. 2147 of June 22, 2021, renewed by DISIM resolution of October 16, 2024).
- Member of the evaluation committee for salary progression (year 2021), University of L'Aquila, appointed by Rectoral Decree no. 64242 – Rep. no. 905/2022 of June 23, 2022.
- Member of the evaluation committee for the award of 15 scholarships supporting international students, A.Y. 2022–23, University of L'Aquila, appointed by Rectoral Decree no. 766 – Rep. no. 57268 of May 31, 2022, and A.Y. 2020–21, appointed by Rectoral Decree no. 668/2020 – Prot. no. 59675 of July 6, 2020.
- Member of the evaluation committee for the call “University Corridors for Refugees – 5.0” (Kenya, Niger, Nigeria, South Africa, Uganda, Zambia, Zimbabwe; 2023–2025), for one scholarship for refugee students enrolled in an English-taught Master's Degree at the University of L'Aquila, A.Y.s 2023–24 and 2024–25, appointed by Rectoral Decree no. 384/2023 of April 11, 2023.
- Scientific Director of the Mathematical Modeling Laboratory, University of L'Aquila, since February 13, 2019.
- Chair of the Timetabling Committee of the Teaching Area Council in Mathematical Engineering, University of L'Aquila, from January 20, 2020 to June 11, 2021.

- Member of the Quality Assurance Group of the Teaching Area Council in Mathematical Engineering, University of L'Aquila, since November 6, 2018.
- Member of the Teaching Planning Committee of the Teaching Area Council in Mathematical Engineering, University of L'Aquila, since April 10, 2019.
- Member of the Organizing Committee of the seminar series "New Faculty Seminars @DISIM" since A.Y. 2018–19, Department of Information Engineering, Computer Science and Mathematics, University of L'Aquila.
- Delegate for career orientation and relations with local industry for the Teaching Area Council of the Bachelor's Degree in Mathematical Engineering, University of L'Aquila, from November 6, 2018 to July 16, 2020.
- Member of the Board of the PhD Program in "Mathematics and Models", University of L'Aquila, since the XXXIV Cycle.
- Member of the Orientation Committee of the Teaching Area Council in Mathematics, University of L'Aquila, since November 2017.
- Departmental Contact Person for the Italian Research Assessment Exercise (VQR) 2011–2014, Department of Mathematics, University of Salerno.
- Departmental Contact Person for the IRIS institutional research output repository, Department of Mathematics, University of Salerno, A.Y. 2016–17.
- Member of the E-Learning Committee, Bachelor's Degree in Computer Science, University of Salerno, 2015–2017.

Student Recruitment, Outreach, and Public Engagement

- *La matematica può salvare il mondo?*, Mathematics PLS day at DISIM, University of L'Aquila, February 13, 2026.
- *Mathematics That Sings, Music That Counts*, within UnivAQ Street Science, September 27, 2025.
- *Pop Canons – Mathematics at the Service of Choral Music*, within UnivAQ Street Science, editions 2022 (Auditorium del Parco, L'Aquila), 2023 (Auditorium del Parco, L'Aquila), 2024 (Parco del Castello, L'Aquila).
- *Third Mission – Knowledge Transfer and Valorization*, Department of Mathematics, University of Salerno, May 30, 2024.
- Speaker in a PCTO outreach event at the Upper Secondary School "Amedeo d'Aosta", L'Aquila, May 17, 2023, talk entitled "*The Mathematics You Don't Know You Are Using: Likes, Reels, and Social Networks*" (online).
- Speaker in a PCTO outreach event at the Upper Secondary School "Ettore Majorana", Avezzano, May 8, 2024, talk entitled "*The Mathematics You Don't Know You Are Using: Likes, Reels, and Social Networks*" (online).
- Speaker in a PCTO outreach event at the Scientific High School "Filippo Masci", Chieti, April 30, 2024, talk entitled "*The Mathematics You Don't Know You Are Using: Likes, Reels, and Social Networks*" (online).
- Speaker in a PCTO outreach event at the Upper Secondary School "Enrico Fermi", Sulmona, May 29, 2023, talk entitled "*The Mathematics You Don't Know You Are Using: Likes, Reels, and Social Networks*" (online).
- Speaker at an orientation meeting for the Bachelor's Degree in Mathematics, University of L'Aquila, at the Upper Secondary School "Amedeo d'Aosta", L'Aquila, May 3, 2023.

- Speaker in a PCTO outreach event at the Scientific High School “Vitruvio”, Avezzano, January 26, 2022, talk entitled “*The Mathematics You Don’t Know You Are Using: Likes, Reels, and Social Networks*” (online).
- Speaker in a PCTO outreach event at the Classical High School “A. Torlonia”, Avezzano, January 19, 2022, talk entitled “*The Mathematics You Don’t Know You Are Using: Likes, Reels, and Social Networks*” (online).
- Creator of the contest “*Create Your Own Mathematical Meme*”, Teaching Area Council in Mathematics, University of L’Aquila, since 2017 (four editions).
- Speaker at an orientation meeting at the “D. Cotugno” High School, L’Aquila, February 8, 2021, presenting the educational offer of DISIM.
- Speaker at UnivAQ Open Days (online due to the COVID-19 emergency), May 5, 2020, talk entitled “*The Mathematics of Social Networks*”.
- Participation in the Rome Student Fair (Fiera di Roma, November 13, 2018) as DISIM representative for the Mathematics area.
- Speaker during the Week of Scientific and Technological Culture organized by the Scientific High School “Vitruvio”, at Castello Orsini, Avezzano, March 13, 2018, talk entitled “*The Mathematics You Don’t Know You Are Using: from Twitter to Amazon, from Shazam to Google*”.
- Speaker at an orientation meeting at Val Vibrata College, Scientific High School “G. D’Annunzio”, Corropoli, January 31, 2018, talk entitled “*The World of Recommendation Systems: the Mathematics of Amazon, Facebook, and Twitter*”.
- Seminar activities within the “Comenius” project at the Scientific High School “Rummo”, Benevento, on the following topics: “*Polynomial Zeros with Sage and Python: Numerical Methods and Their Convergence*”, “*The Mathematics of the Web: Eigenvalues and Linear Systems for Google Search*”, “*Drawing with Matrices: What Lies Behind a Mouse Click*”, A.Y. 2014–15.
- Lecturer within the “Numero Ergo Sum” project of the Department of Mathematics, delivering mathematics outreach activities at the Scientific High School “Da Procida”, Salerno, A.Y. 2015–16.
- Member of the Organizing Committee of the conference “Mathematics and Statistics – PLS (Per Lasciare il Segno)”, University of Salerno, April 4, 2012, within the National Plan for Scientific Degrees – Mathematics and Statistics Project.
- Member of the Organizing Committee of the National Plan for Scientific Degrees – Mathematics and Statistics Project, A.Y. 2011–12, Department of Mathematics, University of Salerno.
- Student recruitment activities within the university event “Collega-Menti”, University of Salerno, October 2008.
- Student recruitment activities within the “Campus” project, University of Salerno, A.Y. 2007–08.
- Student recruitment activities within the “Agasmi – Bringing Young People Closer to Mathematical and Computer Sciences” project, University of Salerno, A.Y. 2007–08.
- Student recruitment activities within the university event “Exposcuola 2007”, University of Salerno, October 2008.