

UNIVERSITÀ DEGLI STUDI DI MILANO

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ANDREA ASPRI CURRICULUM VITAE

INFORMAZIONI PERSONALI

COGNOME	ASPRI
NOME	ANDREA
DATA DI NASCITA	10/11/1986

EDUCATION AND TRAINING

01/11/2020 - present **Postdoctoral Researcher**

Postdoc position at Mathematics Department "F. Casorati" of Università degli Studi di Pavia, under the supervision of Prof. Elisabetta Rocca.

- Title of the research project: Problemi di controllo e di dinamiche a lungo termine per sistemi di equazioni alle derivate parziali non lineari;
- Financial resources (period November 2020 - October 2021): FRG5 - Fondo Ricerca & Giovani 2019 and Progetto ECCELL2018_CSADSM56 - Eccellenza 2018-2022.
- Financial resources (period November 2021 - present): FRG6 - Fondo Ricerca & Giovani 2020 and Progetto ECCELL2018_CSADSM56 - Eccellenza 2018-2022.

01/10/2017 - 31/10/2020 **Postdoctoral Research Scientist**

Research Scientist at RICAM (Johann Radon Institute for Computational and Applied Mathematics), in the group "Inverse Problems and Mathematical Imaging", under the supervision of Prof. Otmar Scherzer, Linz, Austria.

01/11/2013 - 31/10/2016 **PhD in Mathematics**

Mathematics Department "Guido Castelnuovo", Sapienza Università di Roma, Piazzale Aldo Moro 5, 00185 Roma (Italy)

- Thesis Title: *Analysis of a linear elastic model relative to a small pressurized cavity embedded in the half-space.*
- Advisors: Prof. Elena Beretta (Mathematics Department, Politecnico di Milano), Prof. Corrado Mascia (Mathematics Department, Sapienza Università di Roma).
- Referees report: Prof. Ammari Habib, Prof. Scherzer Otmar.

- Date of Defense: January 13, 2017.
- Committee: *Ammari Habib, Francini Elisa, Gianni Roberto.*
- Classification: excellent.

01/10/2010 - 25/03/2013 Master Degree in Applied Mathematics

Mathematics Department "Guido Castelnuovo", Sapienza Università di Roma
Piazzale Aldo Moro 5, 00185 Roma (Italy)

- Thesis Title: *Deformazioni elastiche e variazioni gravitazionali generate da intrusioni ellissoidali con applicazioni alla vulcanologia* (Elastic deformations and gravity anomalies due to ellipsoidal intrusions with applications in volcanology).
- Final grade: 110/110 cum laude.
- Supervisors: Prof. Corrado Mascia (Mathematics Department, Sapienza Università di Roma), Prof. Maurizio Battaglia (Department of the Earth Sciences).

26/09/2005 - 21/09/2010 Bachelor Degree in Mathematics

Mathematics Department "Guido Castelnuovo", Sapienza Università di Roma
Piazzale Aldo Moro 5, 00185 Roma (Italy)

- Thesis Title: *Prodotti infiniti e funzione euleriana Gamma.*
- Final grade: 107/110.
- Supervisor: Prof. Flavia Lanzara (Mathematics Department, Sapienza Università di Roma).

09/2000 - 07/2005 High School Diploma

Liceo Scientifico Statale "Giovanni Vailati", Genzano di Roma, Rome (Italy).

- Final grade: 100/100.

SCIENTIFIC ACTIVITY

Scientific Interests

I'm currently working on inverse problems both from the mathematical analysis and numerical analysis perspective. In the following, a list of the topics of my interest:

- Inverse problems for PDEs with particular interest for mathematical models coming from the applications: uniqueness and stability issues.
- Partial differential equations of elliptic type.
- Shape optimization and phase field methods (with possible applications to 3D printing).
- Regularization methods for ill-posed problems: Data driven regularization and reconstruction methods.

Collaborators

E. Beretta (*Mathematics Department of Politecnico di Milano & NYU Abu Dhabi*)
C. Cavaterra (*Mathematics Department of Università degli Studi di Milano*)
M. de Hoop (*Department of Computational and Applied Mathematics and Department of Earth, Environmental, and Planetary Sciences, Rice University*)
E. Francini (*Mathematics Department of Università degli Studi di Firenze*)
L. Frischauf (*Mathematics Department of University of Vienna*)
A. Gandolfi (*Mathematics Department of NYU Abu Dhabi*)
Y. Korolev (*Mathematics Department of University of Cambridge*)
C. Mascia (*Mathematics Department of Sapienza Università di Roma*)
A. Mazzucato (*Mathematics Department of Penn State University*)

E. Rocca (*Mathematics Department of Università degli Studi di Pavia*)
 E. Rosset (*Mathematics and Geoscience Department of Università degli Studi di Trieste*)
 O. Scherzer (*Mathematics Department of University of Vienna*)
 M. Verani (*MOX, Mathematics Department of Politecnico di Milano*)
 S. Vessella (*Mathematics Department of Università degli Studi di Firenze*)

1. PAPERS AND BOOKS

Book

1. A. Aspri, **An Elastic Model for Volcanology**, published in “Lecture Notes in Geosystems Mathematics and Computing”, Birkhäuser, Springer Nature Switzerland, December 2019. <https://www.springer.com/gp/book/9783030314743>.

List of Publications

1. A. Aspri, E. Beretta, C. Mascia, **Asymptotic Expansion for Harmonic Functions in the Half-Space with a Pressurized Cavity**, *Mathematical Methods in the Applied Sciences*, Volume 39, Issue 10, July 2016, 2415-2430.
2. A. Aspri, E. Beretta, C. Mascia, **Analysis of a Mogi-type model describing surface deformations induced by a magma chamber embedded in an elastic half-space**, *Journal de l'École polytechnique — Mathématiques*, Volume 4, January 2017, 223-255.
3. A. Aspri, E. Beretta, E. Rosset, **On an elastic model arising from volcanology: an analysis of the direct and inverse problem**, *Journal of Differential Equations*, Volume 265, Issue 12, December 2018, 6400-6423.
4. A. Aspri, E. Beretta, A. L. Mazzucato, M. de Hoop, **Analysis of a model of elastic dislocations in geophysics**, *Archive for Rational Mechanics and Analysis* (online first November 2019), Volume 236, Issue 1, April 2020, 71-111.
5. A. Aspri, S. Banert, O. Öktem, O. Scherzer, **A data-driven iteratively regularized Landweber iteration**, *Numerical Functional Analysis and Optimization*, (online first March 2020), Volume 41, Issue 10, 2020, 1190-1227.
6. A. Aspri, E. Beretta, O. Scherzer, M. Muszkieta, **Asymptotic expansions for higher order elliptic equations with an application to quantitative photoacoustic tomography**, *SIAM Journal on Imaging Sciences*, Volume 13, No. 4, pp. 1781-1833.
7. A. Aspri, Y. Korolev, O. Scherzer, **Data driven regularization by projection**, *Inverse Problems*, Volume 36, No. 12, pp. 125009 (2020).
8. A. Aspri, E. Beretta, A. Gandolfi, E. Wasmer, **Mortality containment vs. Economics opening: Optimal Policies in a SEIARD model**, *Journal of Mathematical Economics* Volume 93 (2021), pp. 102490.
9. A. Aspri, E. Beretta, M. V. de Hoop, A. L. Mazzucato, **Detection of dislocations in a 2D anisotropic elastic medium**, *Rendiconti di Matematica e delle sue Applicazioni*, Volume 42, pp. 183-195, for a special issue entitled “Nonlinear Diffusion Problems” dedicated to Maria Assunta Pozio.
10. A. Aspri, L. Frischaut, Y. Korolev, O. Scherzer, **Data driven reconstruction using frames and Riesz bases**. February 2021. Contribution in the volume (see Chapter 13) entitled “Deterministic and Stochastic Optimal Control and Inverse Problems” edited by B. Jadamba, A. Khan, M. Sama, S. Migorski. Waiting for publication by CRC Press.
11. A. Aspri, E. Beretta, A. L. Mazzucato, **Dislocations in a layered elastic medium with applications to fault detection**. Accepted for publication in “Journal of the European Mathematical Society”, March 2021. See <https://www.emis-ph.org/journals/forthcoming.php?jm=jems>.

Submitted/Under revision papers

1. A. Gandolfi, A. Aspri, E. Beretta, K. Jamshad, M. Jiang, **The effect of opening schools on the course of a pandemic: a mathematical study.**

Preprints & Works in progress

1. A. Aspri, E. Beretta, C. Cavaterra, E. Rocca, M. Verani, **Identification of cavities and inclusions in a linear elastic medium using a phase field approach.**
2. A. Aspri, E. Beretta, E. Francini, S. Vessella, **Stability estimates for polyhedral inclusions.**
3. P. Antonietti, A. Aspri, E. Beretta, A. L. Mazzucato, **Shape derivative for detection of an open surface in the conductivity equation.**
4. P. Antonietti, A. Aspri, E. Beretta, A. L. Mazzucato, **A shape optimization approach for detection of elastic dislocations.**

2. RESEARCH PROJECTS

Member of the projects

1. Member of PRIN ("Progetti di Rilevante Interesse Nazionale") titled "Mathematics for Industry 4.0 (Math4I4)" whose principal investigator is Prof. Pasquale Ciarletta (Department of Mathematics, Politecnico di Milano). The local coordinator at Mathematics Department of Università degli Studi di Pavia, university where I'm currently working, is Prof. Elisabetta Rocca. Total sum granted 483,800 Euro.
2. Member of the project financed by the State of Upper Austria with the title "*Förderung des Johann Radon Institute for Computational and Applied Mathematics (RICAM) der Österreichischen Akademie der Wissenschaften (ÖAW)*" (English translation: "Grant for Johann Radon Institute for Computational and Applied Mathematics (RICAM) of the Austrian Academy of Sciences"), from January 2018 to October 2020. Annual total sum granted 250,000 Euro per year. The project had the purpose of supporting mathematical research with potential applications in the life sciences and medicine. In September 2020, the Scientific Assistant of RICAM (Dr Peter Kritzer) applied for an extension of this grant, for other three years, submitting a research project divided into three subprojects. I wrote and edited one of the three subprojects, entitled "Data driven regularizations". The institute received the grant in December 2020.
3. Associate member of the SFB project "Tomography across the scales" (<https://tomography.univie.ac.at/>). Principal investigators: Otmar Scherzer (University of Vienna - Mathematics Department), Ronny Ramlau (RICAM, Linz), Wolfgang Drexler (Center for Medical Physics and Biomedical Engineering), Peter Elbau (University of Vienna - Mathematics Department), Monika Ritsch-Marte (Medical University of Innsbruck), Gerhard Schütz (TU Wien - Institute of Applied Physics).
4. "Mathematical modeling for the identification of magma reservoirs from gravitation and deformation data", Sapienza Università di Roma, 2013. Principal investigator: Mascia Corrado.
5. "Modelli Differenziali Non Lineari: Analisi, Approssimazione ed Applicazioni", Sapienza Università di Roma, 2015. Principal investigator: Falcone Maurizio.
6. "Modelli Differenziali Non Lineari: Analisi, Approssimazione ed Applicazioni", Sapienza Università di Roma, 2016. Principal investigator: Finzi Vita Stefano.

3. AWARDS, RESEARCH VISITS AND MISCELLANEA

Awards

August 2015 - December 2016	Research Project: Principal Investigator of the project "Avvio alla Ricerca 2015" for young researchers financed by Sapienza Università di Roma, 1K euro. Project's Title: <i>Problemi inversi e algoritmi di ricostruzione relativi a cavità pressurizzate in semispazi con applicazioni alla vulcanologia (Inverse problems and reconstruction algorithms for pressurized cavities in the half-space with applications in volcanology).</i>
December 2020	Selected for "Emerging Talents 2021": nominated by the editorial board of the journal "Inverse Problems" to submit a paper for a special issue in 2021 reserved to the most talented young scientists working on inverse problems.

Research visits

14 - 20 December 2019	Mathematics Department "Renato Caccioppoli" of University of Naples "Federico II". Invitation received by Salvatore Cuomo and Francesco Calabrò.
24 February- 10 March 2020 15 - 23 February 2019 3 - 12 March 2017 13 - 21 February 2016	Mathematics Department of New York University Abu Dhabi. Invitation received by Elena Beretta.

Referee Activity

Referee for the following international journals.

- Applicable Analysis;
- Applied Mathematics and Computation;
- Boundary Value Problems;
- Computational Methods in Applied Mathematics;
- Economic Analysis and Policy;
- International Journal on Geomathematics (GEM);
- Inverse Problems and Imaging;
- Inverse Problems in Science & Engineering;
- Journal of Computational and Applied Mathematics;
- Journal of Inverse and Ill-Posed Problems;
- Journal of Mathematical Imaging and Vision;
- Journal of Mathematics in Industry;
- SIAM Journal on Mathematical Analysis;
- SIAM Journal on Imaging Sciences;
- SIAM Multiscale Modeling and Simulation.

Public Competitions

My CV has been selected for oral examinations in the following competitions.

15 July 2021	Competition for a RTDb position at Department of Mathematics and Geoscience, Università degli Studi di Trieste. Committee: Berti Massimiliano, Cuccagna Scipio (president), Sincich Eva
13 May 2021	Competition for a RTDa position at Department of Mathematics of Sapienza, Rome. Committee: Carpi Sebastiano, Mora Maria Giovanna, Siconolfi Antonio (president)
4 May 2021	Competition for a RTDa position at Mathematics Department of Università di Bologna; Committee: Cicognani Massimo, Di Fazio Giuseppe (president), Stroffolini Bianca
20 January 2021	Competition for a RTDa position at Department of Basic and Applied Sciences for Engineering, Sapienza, Università di Roma, Rome; Committee: Scarabotti Fabio (president), Giuseppe Buttazzo, Antonio Segatti
3 December 2020	Competition for a RTDa position at Department of Mathematics "DIMA", Università degli Studi di Genova, Genoa; Committee: Alberto Perelli (president), Giuseppe Molteni, Alessandro Zaccagnini
10 November 2020	Competition for a RTDa position at Department of Mathematics "F. Casorati", Università degli Studi di Pavia, Pavia. Committee: Giovanni Alberti (president), Elisabetta Rocca, Rodica Toader
10 September 2020	Competition for a postdoc position at Department of Mathematics "F. Casorati", Università degli Studi di Pavia, Pavia. Result: first classified. I started the postdoc position on November 1, 2020. Committee: Elisabetta Rocca (president), Simona Fornaro, Maria Giovanna Mora
May 2020	Competition for a RTDa position at Department of Engineering, Information Science and Mathematics, Università degli Studi dell'Aquila, L'Aquila. Committee: Fabio Camilli (president), Davide Barilari, Cristina Pignotti

Popularization contribution

30 November 2020	Interviewed by Markus Kessler of the Austrian Academy of Sciences to speak about the paper "Mortality containment vs. Economics opening: Optimal Policies in a SEIARD model", see previous section "List of Publications" for details on the paper. Title of the interview: "Optimale COVID-Strategie: Der Wert eines Menschenlebens". The interview is on the website of the Austrian Academy of Sciences https://www.oeaw.ac.at/detail/news/zu-fruehe-oeffnung-kann-zu-naechstem-lockdown-fuehren
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4. CONFERENCES, WORKSHOPS AND SEMINARS

Organization of Workshops/Minisymposia

21 March - 25 March 2022	Co-organizer with G.S. Alberti, L. Frischau, and O. Scherzer of the Mini-symposium “ <i>Data-Driven Methods in Inverse Problems and Imaging</i> ”, to the SIAM Conference on Imaging Science, to be held in Berlin, 21 March – 25 March, 2022.
30 August - 3 September 2021	Co-organizer with L. Mindrinos of the Mini-symposium “ <i>New trends in tomography: From microscopy to astronomy</i> ”, to the National Congress SIMAI 2020, to be held in Parma (Italy), 30 August – 3 September, 2021.
8 July - 12 July 2019	Co-organizer with E. Beretta and A. Mazzucato of the Mini-symposium “ <i>Inverse Problems in Elastic Media</i> ” to Applied Inverse Problems (AIP) conference, held in Grenoble, 8 – 12 July, 2019.
28 May - 1 June 2018	Co-organizer with E. Beretta, M. de Hoop, E. Francini, and O. Scherzer of the INdAM workshop “ <i>Reconstruction Methods for Inverse Problems</i> ” held in Rome 28 May - 1 June, 2018.

Upcoming conferences and seminars

May 2022	TBA , Workshop titled “Inverse Problems for Anomalous Diffusion Processes”, Banff International Research Station for Mathematical Innovation and Discovery (BIRS), Canada, 8-13 May 2022.
May 2022	Data driven regularization , 10th International Conference “Inverse Problems: Modeling and Simulation”, Minisymposium M14 “Mathematical Methods in Tomography Across the Scales”, Malta, 23-27 May 2022 (invited talk).
March 2022	Asymptotic expansions for higher order elliptic equations with applications in Quantitative Photoacoustic , SIAM Conference on Imaging Science, Berlin, Minisymposium “Mathematical Imaging at the Small Scale: Modeling, Analysis and Applications”, 22-25 March 2022 (invited talk).
November 2021	Data-driven regularization for linear inverse problems , The 3rd International Conference on Machine Learning and Intelligent Systems (MLIS 2021), Xiamen (China), 8-11 November 2021 (invited talk).

Conference/Workshop Invited Talks

13 October 2021	Data-driven regularization by projections , PRIMO (Post graduate Researchers in Inverse problems, Machine learning and Optimization) workshop, Department of Mathematics of the University of Bologna, 11-13 October 2021.
1 September 2021	Data driven regularization by projection , Contributed talk in IFIP TC7 Conference on SystemModelling and Optimization, Quito, 30 August - 3 September 2021.
4 March 2021	Data driven regularization by projection , SIAM Conference on Computational Science and Engineering (CSE21), Minisymposium “Using data to drive iterative methods: subspace recycling and other techniques”, Fort Worth, Texas (U.S.), 1-5 March 2021.

25 January 2021	Topological derivative for higher order elliptic equations with applications in Quantitative Photoacoustic , Computational and Applied Mathematics Colloquium, Department of Mathematics, Penn State University
2 September 2020	Updates on data driven regularization by projection , 4th SFB workshop "Tomography Across the Scales", online meeting, 1-2 September 2020.
15 January 2020	A data-driven iteratively regularized Landweber iteration , American Mathematical Society (AMS) Special Session on "Interactions of Inverse Problems, Computational Harmonic Analysis, and Imaging", Denver, Colorado, 15-18 January 2020.
2 December 2019	Data driven regularization by projection , 3rd SFB workshop "Tomography Across the Scales", Obergurgl (Austria), 1-5 December 2019.
25 June 2019	Analysis of a model of elastic dislocations in geophysics , Reconstruction Methods for Inverse Problems, Banff International Research Station for Mathematical Innovation and Discovery (BIRS), Canada, 24-28 June 2019.
4 December 2018	A data-driven iteratively regularized Landweber iteration , 2nd SFB workshop "Tomography Across the Scales", Obergurgl (Austria), 3 - 6 December 2018.
23 May 2018	On the inverse problem of determining a pressurized cavity in a half-space , Minisymposium M10 of the 9th International Conference "Inverse Problems: Modeling and Simulation", Malta, 21 - 25 May 2018.
22 March 2018	On an elastic model arising from volcanology: an analysis of the direct and inverse problem , workshop "Inverse Problems in the Alps II", Obergurgl (Austria), 21 - 23 March 2018.
27 March 2017	A linear elastic model to detect magma chamber , conference "100 Years of the Radon Transform", RICAM - Linz, 27 - 31 March 2017.

Seminars

2 February 2021	<i>Elastic dislocations with applications to fault detection</i> , Mathematics Department "F. Casorati", Università degli Studi di Pavia, 2 February 2021.
16 December 2020	<i>Analysis of a model of elastic dislocations in geophysics</i> , Virtual Inverse Days Workshop 2020, organized by the Finnish Meteorological Institute and University of Helsinki, Helsinki, 14-18 December 2020.
15 December 2020	<i>Data driven regularization</i> , Malga seminar Analysis and Learning, Department of Mathematics, Università degli Studi di Genova, Genoa, 15 December 2020.
10 June 2020	<i>Data Driven regularization by projection</i> . Selected as speaker by the director of RICAM (Prof. Ronny Ramlau) for the first of the joint seminars between RICAM (Linz) and Fudan University (Shanghai), 10 June 2020.
7 January 2020	<i>Data Driven regularization</i> , Department of Mathematics "Guido Castelnuovo", Sapienza University of Rome, Seminars of Numerical Differential Modeling, 7 January 2020.
16 December 2019	<i>Topological higher order derivatives with applications in quantitative photoacoustic tomography</i> , Mathematics Department "Renato Caccioppoli", University Federico II of Naples, Naples, Italy.
23 May 2019	<i>Inverse Problems and Mathematical Imaging</i> , ÖAW Betriebsausflug, RICAM (Johann Radon Institute for Computational and Applied Mathematics), Linz.
4 July 2018	<i>A modified Landweber driven by expert knowledge</i> , First SFB Internal Meeting, Computational Science Center, Vienna.

20 July 2017	<i>On the direct and inverse problem of a linear elastic model coming from volcanology</i> , RICAM - Inverse Problems and Mathematical Imaging Group, Linz.
8 May 2017	<i>Analysis of a linear elastic model relative to a small pressurized cavity in the half-space</i> , A.MA.CA. (Analisi MAtematica al CAstelnuovo) Mathematics Department "Guido Castelnuovo", Sapienza Università di Roma.
31 May 2016	<i>A linear elastic model to detect magma chamber</i> , Mathematics Department "Guido Castelnuovo", Sapienza Università di Roma, Seminars of Numerical Differential Modeling, 31 May 2016.
5 May 2015	<i>Harmonic functions in the half-space with a pressurized cavity</i> , Mathematics Department "Guido Castelnuovo", Sapienza Università di Roma, Seminars of Numerical Differential Modeling, 5 May 2015.

Poster Presentations

25 - 29 May 2015	Asymptotic expansion of the solution of a Neumann problem for harmonic functions in the half-space with a small cavity , conference "Applied Inverse Problems (AIP 2015)", Helsinki.
26 - 28 August 2014	On detecting a magma chamber from deformation and gravity measurements on the boundary of the half-space , conference "Inverse problems - from theory to application (IPTA2014)", Institute of Physics, Bristol.
19 - 23 May 2014	On detecting a magma chamber from deformation and gravity measurements on the boundary of the half-space , conference "Recent progress in mathematical and numerical analysis of inverse problems", CIRM, Luminy, Marseille.

TEACHING EXPERIENCE

1. THESIS SUPERVISIONS

Second advisor for Master Thesis

Candidate: Frischauf Leon (Mathematics Department, University of Vienna);
First advisor: Scherzer Otmar (University of Vienna);
Title: Regularization by orthogonalization and frames;
Defence date: August 21, 2020;
Present position: Ph.D. student at Department of Mathematics, University of Vienna.

TEACHING

Legend for Departments (and related Universities) which appear in the sections below.

- **University Unitelma Sapienza**: CS=Unitelma-Sapienza = Computer Science dept. Unitelma-Sapienza;
- **Sapienza, University of Rome**: CS = Computer Science dept.; EE = Energy Engineering dept.; AE = Aerospace Engineering dept.; CE = Chemistry Engineering dept.
- **University of Pavia**: DIEI = Department of Industrial Engineering and Information, DCEE= Department of Civil and Environmental Engineering; DDS = Department of Drug Sciences; DC = Department of Chemistry.

2. GIVEN COURSES

01.10.2021 - present	Mathematics with Elements of Statistics (DDS, Pavia), instructor together with Prof. Stefano Lisini, 24 hours of 48 hours.
29.09.2020 - 27.09.2021	Differential Calculus (CS, Sapienza), telematic course
24.02.2020 - 21.02.2021	Integral Calculus (CS, Sapienza), telematic course
23.09.2019 - 28.09.2020	Differential Calculus (CS, Sapienza), telematic course
25.02.2019 - 23.02.2020	Integral Calculus (CS, Sapienza), telematic course
24.09.2018 - 22.09.2019	Differential Calculus (CS, Sapienza), telematic course

3. TUTORING

01.10.2021 - present	Two classes on Ordinary Differential Equations. Title of the course "Advanced Mathematical Methods for Engineers" (DIEI, Pavia - Master Program in Electronic Engineering), 4 hours
01.10.2021 - present	Mathematical Analysis I (DCEE, Pavia), 6 hours
27.09.2021 - present	Advances Mathematical Methods for Engineers (DIEI, Pavia - Master Program in Electronic Engineering), 24 hours
01.03.2021 - present	Integral Calculus (CS-Unitelma-Sapienza)
01.10.2020 - 31.09.2021	Differential Calculus (CS-Unitelma-Sapienza)
01.03.2021 - 16.06.2021	Five classes on topics of mathematical analysis. Title of the course "Complementi di Matematica per le Scienze Chimiche" (DC, Pavia), 10 hours
01.11.2020 - 22.12.2020	Two classes on Ordinary Differential Equations. Title of the course "Advanced Mathematical Methods for Engineers" (DIEI, Pavia - Master Program in Electronic Engineering), 4 hours
01.03.2020 - 28.02.2021	Integral Calculus (CS-Unitelma-Sapienza)
01.10.2019 - 30.09.2020	Differential Calculus (CS-Unitelma-Sapienza)
01.03.2019 - 29.02.2020	Integral Calculus (CS-Unitelma-Sapienza)
01.10.2018 - 23.09.2019	Differential Calculus (CS-Unitelma-Sapienza)
01.10.2017 - 30.09.2018	Differential Calculus (CS-Unitelma-Sapienza)
02.10.2016 - 10.02.2017	Mathematical Analysis 1 (EE);
01.10.2016 - 30.09.2017	Differential Calculus (CS-Unitelma-Sapienza)
04.2016 - 09.2016	Mathematical Analysis 2 (EE);
10.2015 - 07.2016	Mathematical Analysis 1 (EE 50 hours, AE 50 hours, CE 50 hours);
01.02.2015 - 31.01.2016	Integral Calculus (CS-Unitelma-Sapienza)
01.10.2015 - 30.09.2016	Differential Calculus (CS-Unitelma-Sapienza)
01.10.2014 - 30.09.2015	Differential Calculus (CS-Unitelma-Sapienza)

4. PRECALCULUS COURSES

22.09.2014 - 31.12.2014	Faculty of Mathematics, Physics and Natural Sciences (Sapienza University of Rome)
08.09.2014 - 19.09.2014	Faculty of Information Engineering, Informatics and Statistics (Sapienza University of Rome).

5. HIGH SCHOOL

20.06.2017 - 07.07.2017	Examiner of Mathematics and Physics and vice-president of the Xcommittee - RMLI01010 - Classics high school "A. Mancinelli", Velletri (Rome)
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PERSONAL SKILLS

Mother tongue Italian

Other languages	UNDERSTANDING		SPEAKING		WRITING
	Listening	Reading	Spoken interaction	Spoken production	
English	C1	C1	B2	B2	C1
German	A1	A2	A1	A1	A2

Computer skills Competent with most Microsoft Office programmes.
Very good knowledge of Matlab;
Good knowledge of Bocop, C++, Freefem ++, Mathematica and Fortran90.
Good knowledge of Cisco WebEx platform

ADDITIONAL INFORMATION

Memberships

- Partner of UMI "Unione Matematica Italiana" since 2021.
- Partner of SIMAI "Società Italiana di Matematica Applicata e Industriale" from 23-12-2013.
- Member of GNAMPA "Gruppo Nazionale per l'Analisi Matematica, la Probabilità e le loro Applicazioni" from January 2014.

Data 15/10/2021

Luogo PAVIA