Paolo Bussotti

Curriculum Vitae et Studiorum

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Paolo Bussotti

CURRICULUM VITAE ET STUDIORUM

PERSONAL DATA

date of birth:	1 January 1966
place of birth	Livorno, Italy
citizenship:	Italian

CONTACT DETAILS

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POSITION

From 19 December 2022 Associate Professor in History of Science and Techniques, DIUM (Department of Humanities), University of Udine.

Didactic activity:

- Every year course of History of Science, DIUM, University of Udine.

- Every other year course of History of Mathematics and Didactics of Mathematics, DMIF (Department of Mathematics), University of Udine.

- Accademic Year 2022-2023: Laboratory of Didactics of Mathematics, DILL (Department of Languages), University of Udine.

- Accademic Year 2023-2024: Interaction man-animal, DI4A (Department of Agro-Food, Environmental and Animal Sciences), University of Udine

QUALIFICATIONS

- 1991 Laurea in Storia (equivalent to B.A.+M.A.), summa cum laude, Faculty of Humanities, Department of History, University of Pisa; title of the dissertation: "Cantor, Dubois-Reymond e Veronese: stili e metodi diversi nella matematica alla fine dell'Ottocento". ("Cantor, Dubois-Reymond and Veronese: different styles and methods in mathematics at the end of the 19th century"). Supervisor Prof. Tito Tonietti.
- 1996 PhD in history (history of science) at the University of San Marino. Title of the dissertation: "Il concetto di fondazione nel dibattito matematico-filosofico di fine Ottocento" ("The concept of foundation in the mathematical-philosophical debate at the end of the 19th century"). Supervisor Prof. Umberto Bottazzini.
- 2013 Abilitazione (Qualification, Habilitation, venia docendi) at Professore Associato (Associate Professor) in Logica, Storia e Filosofia della Scienza (Logic, History and Philosophy of Science) for the Italian Universities. Sect. 11/C2. Final judgment of the Commission 4 December 2013.
- 2014 Abilitazione (Qualification, Habilitation, venia docendi) at Professore Associato (Associate Professor) in Logica matematica e Matematiche Complementari (Mathematical Logic and Complementary mathematics) for the Italian Universities. Sect. 01/A1. Final judgment of the Commission 7 March 2014.
- 2022 Abilitazione (Qualification, Habilitation, venia docendi) at *Professore Ordinario* (Full Professor) in *Logica, Storia e Filosofia della Scienza* (Logic, History and Philosophy of Science) for the Italian Universities. Sect. 11/C2. Final judgment of the Commission 1 June 2022. Valid from 01/06/2022 to 01/06/2032.
- 2022 Abilitazione (Qualification, Habilitation, venia docendi) at *Professore Ordinario* (Full Professor) in *Logica matematica e Matematiche Complementari* (Mathematical Logic, and Complementary Mathematics) Sect. 01/A1. Final judgment of the Commission 27 September 2022. Valid from 27/09/2022 to 27/09/2032.
- NB: Since 2012, the Abilitazione is necessary to hold a professorship in the Italian

universities.

OTHER QUALIFICATIONS

2013 Abilitazione (Qualification) for the teaching of History and Philosophy in the Italian high schools-gymnasia. Mark 99/100. Final proof 24 October 2013.

Languages

Modern Languages

Italian (mother tongue),

English (fluent),

German (fluent),

French (able to read and understand scientific language),

Spanish (able to read and understand scientific language)

Classical Languages

Latin,

Greek.

Main research areas:

- *history of mathematics* : a) history of number theory (Diophantus, Fibonacci, Bachet, Fermat, Euler, Lagrange, Gauss). In particular examination of the methods used in number theory from the 17th to the 19th century; b) history of geometry, with particular reference to projective geometry in the 19th century (von Staudt, Steiner, Enriques).
- Logic; Philosophy and Foundations of mathematics (Bolzano Cantor, Frege, Dubois-Reymond, Veronese, Poincaré, Hilbert).
- 3) History and philosophy of science in the modern age: a) history of astronomy and

physics (Galileo, Kepler, Descartes, Newton, Leibniz); b) Editions of the *Enciclopédie* published in Italy; c) concept of causality in physics.

- 4) Mathematics education: a) the problems of mathematics education, as to geometry in the 19th century and at the beginning of the 20th century; b) researches on the possible use of history of mathematics inside mathematics education with particular reference to the teaching of mathematical analysis in the last year of the gymnasium and the first year at the university.
- 5) *Relations between psychoanalysis and exact sciences*, in particular relations Jung-Pauli and Ignacio Matte Blanco's theory.

ACADEMIC AFFILIATIONS

- 2000-2005 Member of SISM (Società Italiana di Storia delle Matematiche, Italian Society for History of Mathematics).
- 2004-2010 Member of the Centro Studi Enriques, Livorno, Italy.
- Since 2008 Member of the Commissione per la Pubblicazione della Edizione Nazionale delle Opere di Federigo Enriques (Commission for the publication of the National Edition of the works by Federigo Enriques).
- Since 2012 Member of SISFA, Società Italiana di Storia della Fisica e dell'Astronomia (Italian Society for the History of Physics and Astronomy).
- 2013 Member of the Research Centre for the Theory and History of Science, University of West Bohemia, Pilsen, Czech Republic.
- Since 2014 Member of the European Society for the History of Science (ESHS).
- Since 2016 Member of the DIUM (Department of Humanities), University of Udine, Italy.
- Since 2022 Member of the IDTC (Inter–Divisional Teaching Commission).

ACADEMIC ACTIVITIES

Positions held

2003-2005 Alexander-von-Humboldt-Foundation Fellowship. Title of the project: "The history of the indefinite descent and of the methods of reduction from Fermat to Gauss". Host: Professor Dr. Menso Folkerts, director of the Lehrstuhl für

Geschichte der Naturwissenschaften (Institute for the History of Natural Sciences), Ludwig-Maximilians-Universität, Munich, Germany.

From May 2003 to April 2004. Appointed again from May 2004 to April 2005.

- 2005 Scientific collaborator at the Kepler-Kommission, Bayerische Akademie der Wissenschaften (Bavarian Academy of Sciences), Munich, Germany. <u>Period</u> <u>June-August 2005.</u>
- 2008-2010 Director of the Centro Studi Enriques.
- Since 2008 Scientific collaborator of the "Commissione per la pubblicazione dell'Edizione Nazionale delle opere di Federigo Enriques" ("Commission for the publication of the National Edition of the works by Federigo Enriques").
- 2013 Foreign Lecturer at the Research Centre for the Theory and History of Science, University of West Bohemia, Pilsen, Czech Republic.

Period: 02 May- 31 May.

2013-2014 Alexander-von Humboldt-Foundation-three months-Fellowship. Title of the project: "The possible influence of Kepler's concept of force on Leibniz's physics". Host: Professor Dr. Eberhard Knobloch (Berlin-Brandenburgische Akademie der Wissenschaften).

Period: 1 December 2013-28 February 2014.

- Since 2015 Lecturer of History of Science at Udine University.
- 2016-2017 Research Fellow at the DIUM (Department of Humanities), Udine University.
- Since 2017 Lecturer of History of Mathematics at Udine University.
- 2018-2019 Research fellow at the DMIF (Department of Mathematics, Informatics, Physics), Udine University.
- Since 2018 Lecturer of Didactics of Mathematics at Udine University
- 2019 Alexander-von Humboldt-Foundation-three months-Fellowship. Title of the project: "The foundation of projective geometry in the first half of the 19th century". Host: Prof. Dr. Hannes Leitgeb (Munich Center for Mathematical Philosophy, Ludwig Maximilians Universitaet).

Period 01 May - 31 July, 2019

2019 From December 2019 to December 2022 position as Senior Researcher in History of Science and Techniques at the DIUM, University of Udine.

DIDACTICAL ACTIVITY

- 2002 History and Philosophy (teacher), Liceo scientifico "F. Enriques", Livorno.
- 2014-2015 History (teacher), Liceo scientifico "F. Enriques", Livorno.
- 2015-2016 History of Science, Udine University, Department of Humanities, first semester. Title of the course: "Storia dell'astronomia da Tolomeo a Copernico con elementi di astronomia di posizione" ("The history of astronomy from Ptolemy to Copernicus, with elements of positional astronomy").
- 2016-2017 History of Science, Udine University, Department of Humanities, first semester. Title of the course: "Il concetto di relatività nella storia della fisica: Galileo e Einstein" ("The concept of relativity in the history of physics: Galileo and Einstein").
- 2017-2018 History of Science, Udine University, Department of Humanities, first semester. Title of the course: "La meccanica quantistica. Sviluppo storico e analisi concettuale" ("The quantum mechanics. Its historical development and conceptual analysis").
- 2017-2018 History of Mathematics, Udine University, Department of Mathematics, Informatics, Physics, second semester. Institutional Course.
- 2018-2019 Didactics of Mathematics, Udine University, Department of Mathematics, Informatics, Physics, first semester. Institutional Course.
- 2018-2019 History of Science, Udine University, Department of Humanities, first semester. Title of the course: "Einstein e il suo concetto di relatività" ("Einstein and his concept of relativity").
- 2019-2020 History of Science, Udine University, Department of Humanities, first semester. Title of the course: "Storia della astronomia da Tolomeo a Newton con elementi di astronomia di posizione" ("History of astronomy from Ptolemy to Newton with elements of positional astronomy").
- 2019-2020 History of Mathematics, Udine University, Department of Mathematics, Informatics, Physics, second semester. Institutional Course.
- 2019-2020 Laboratory of Cosmology, Udine University, Department of Humanities,

second semester. Detailed analysis of some of the themes addressed in the course of History of Science.

OTHER TASKS

From January 2020 to May 2021: spaces manager for the DIUM.

Since October 2021 member of the Parithetic Commissione Professors-Studnets of the DIUM.

Given Lectures and seminars

- 2003 Seminar at the Lehrstuhl für Geschichte der Naturwissenschaften, Ludwig Maximilians Universität, München. Title: "An approach to the indefinite descent". Date 22 May 2003.
- 2004 Seminar at the Lehrstuhl für Geschichte der Naturwissenschaften, Ludwig Maximilians Universität, München. Title: "Giuseppe Veronese and his mathematics of the infinity", date 18 November 2004.
- 2008 Lecture titled: "Storia recente della teoria dei numeri", ("Recent history of Number Theory"), Accademia Pontaniana, Napoli, 29 May.
- 2011 Lecture at the Seminar of the PhD School in human sciences addressed to the PhD students in philosophy of science, University of Pisa. Title of the seminar: "Scienza antica, scienza moderna, scienza 'altra". Title of my lecture: "Si può parlare di una rivoluzione dimenticata della scienza ellenistica" ("Is it possibile to speak of a forgotten revolution of hellenistic science?"). 15 March 2011.
- 2012 Lecture for the PhD students in history of science: "The Method of the Infinite Descent and its Applications in Number Theory", Research Centre for Theory and History of Science, Department of Philosophy, Faculty of Philosophy and Arts, Pilsen, Czech Republic. 26 November 2012.
- 2013 Lecture at the 3th Winter Mathematical School organized by Brno University in Tri Studne, Czech Republic, 24-27 January. The lectures were dedicated to the subject "Mathematics for the People!" or History of Mathematics and Popularization with respect to history of the sciences in general. My lecture on

25th. Title: "Fibonacci, a great mathematician lived in the Middle Ages: between theoretical and practical mathematics".

- 2013 Workshop titled "L'ultimo teorema di Fermat a vent'anni dalla sua dimostrazione" ("Fermat's last theorem twenty years after its proof") at the Department of Mathematics, University of Firenze. Inside the workshop my lecture was: "La teoria dei numeri di Fermat e i suoi segreti" ("Fermat's number theory and its secrets"). 12 March.
- 2013 Seminar at the Research Centre for Theory and History of Science, Department of Philosophy, Faculty of Philosophy and Arts, Pilsen, Czech Republic. Title: "The concept of force in Kepler". 20 May.
- 2013 Lecture at the Seminar for PhD students "Dialogues between Science and Philosophy", Department of Philosophy, Faculty of Philosophy and Arts, Pilsen, Czech Republic. Title: "The Influence of Philosophy on Cantor's Mathematics". 23 May.
- 2013 Seminar at the SCité Lab, UFR de Physique, Université Lille1, France. Title: "Le concept de force en Johannes Kepler. Réflexions historiques et épistémologiques". 6 June.
- 2014 Lecture addressed to the teachers of mathematics, physics, sciences, history and philosophy of the Liceo Scientifico F. Cecioni, Livorno. Lecture included inside the project "Progetto della Regione Toscana (DD 2329 27/05/2013). Laboratorio del Sapere Scientifico". Title: "Un possibile ruolo per la storia della scienza nell'insegnamento delle materie scientifiche" ("A possible role for history of science inside the teaching of scientific subjects in the high school"). Date: 1 April.
- 2014 Lecture as invited expert at the chair of Geometry (Prof. Ciro Ciliberto), University Roma Tor Vergata. Title of my lecture: « La teoria della resistenza dei materiali in Galileo Galilei » ("The theory of the materials-resistance in Galileo Galilei"). Date: 20 May.
- 2015 Lesson at Liceo scientifico Enriques (scientific high school, Livorno) and at the ITI (technical high school, Livorno) titled: "Federigo Enriques: una grande figura della cultura europea tra matematica e filosofia" (Italia. Translation: "Federigo Enriques: a great figure of the European culture, between

mathematics and philosophy"). Lesson given on 27 February at the Liceo scientifico Enriques and on 1 April at the ITI.

- 2015 Lecture at the Department of Physics, University of Pisa, on the subject "La teoria planetaria di Gottfried Wilhelm Leibniz" (Italian. Translation: The planetary theory of Gottfried Wilhelm Leibniz), 17 April.
- 2015 Talk at the Munich Center for Mathematical Philosophy, Department of Philosophy, Ludwig Maximilians Universität, Munich. Title of the talk: "Giuseppe Veronese: the Fascination of Infinity", 7 May.
- 2016 Lecture entitled: "Gli elementi fondamentali dell'astronomia di Tolomeo" ("The fundamental elements of Ptolemy's astronomy"), at the Gymnasium "I.S.I.S., G.A. Pujati", Sacile. Lecture organized by Udine University. Date: 8 March.
- 2016 Lecture entitled: "Storia e uso dell'astrolabio" ("History and use of the astrolabe"). at the Gymnasium "I.S.I.S., G.A. Pujati", Sacile. Lecture organized by Udine University. Date: 22 March.
- 2016 Seminar at the Department of Mathematics, University of Udine, on the subject "La teoria planetaria di Leibniz" (Italian. Translation: "Leibniz's planetary theory"), 19 April.
- 2016 Lecture addressed to the students of History of Physics, Department of Physics, University of Pisa, on the subject "Le supposte prove galileiane a favore del sistema copernicano" (Italian. Translation: "The supposed proofs by Galileo in favour of the Copernican system"), 29 April.
- 2017 Talk at the Scuola Superiore dell'Università di Udine (Superior School of Udine University) concerning the presentation of my book *Leibniz dal calcolo infinitesimale al linguaggio dei computer, 30 March.*
- 2017 Seminar at the Department of Mathematics, University of Udine, on the subject "L'edizione ginevrina dei *Principia* di Newton (1739-1742): i contenuti e il contesto" (Italian. Translation: "Newton's *Principia* Geneva Edition (1739-1742): the content and the context"), 17 May.
- 2017 Seminar at the Department of Mathematics, University of Udine, on the subject "Il concetto di spazio in Federigo Enriques: tra scienza e conoscenza" (Italian. Translation: "The concept of space in Federigo Enriques: between science and

knowledge), 15 June.

- 2017 Seminar at SISSA (Scuola Internazionale di Studi Avanzati, International School for Advanced Studies, Trieste) on the subject "Newton's physics: the results of a genius lived in the 17t century", 20 June.
- 2018 Seminar at the DMIF (Department of Mathematics, Informatics, Physics), University of Udine) on the subject "Zeno's paradoxes", 19 April.
- 2018 Seminar at the DMIF (Department of Mathematics, Informatics, Physics), University of Udine) on the subject "Il problema dei fondamenti della matematica tra Cantor e Gödel (1870-1930)" (Italian. English translation; "The problem of mathematics foundations between Cantor and Gödel (1870-1930)", 17 May.
- 2018 Lecture at the "Scuola Nazionale per gli insegnanti sulla Fisica Moderna", Udine. ("National School for the teachers on Modern Physics"). Title of my lecture: "Il passaggio dalla prima alla seconda quantizzazione: aspetti fisici e filosofici" ("The transition from the first to the second quantization: physical and philosophical aspects"). 27 July.
- 2018 Course of lectures (10 hours) addressed to the teachers of Philosophy of Liceo Marinelli, Udine. Title: "Filosofia e cosmologia dalla rivoluzione copernicana alle teorie cosmologiche del Novecento" ("Philosophy and cosmology from Copernican revolution to cosmological theories developed in the 20th century). Period: 18 September 2018 02 October 2018.
- 2018 Course of lectures (6 hours) addressed to the teachers of Mathematics of the high schools and the Gymnasia in Udine. Title: "Workshop di formazione per docenti di matematica della Scuola Superiore di Secondo Grado". ("Didactical workshop for the High Schools teachers"). Period: 21 September 2018- 5 October 2018.
- 2018 Two lectures at the "Scuola Superiore dell'Università di Udine". Title "The concept of form in geometry". 10 December and 14 December 2018.
- 2018 Lesson addressed to the pupils attending the first class of the high school, Liceo Matematico "Malignani" (Mathematical Liceo "Malignani"), Udine. Subject: "The origin of rational geometry". 17 December 2018.

- 2019 Lesson addressed to the pupils of the Istituto Bertoni (private high schoollyceum), Udine. Subject: "Ideas on gravity from Aristotle to Newton". 02 February, 2019
- Lesson addressed to the pupils attending the fifth (last) class of the high school,
 Liceo Matematico "Malignani" (Mathematical Liceo "Malignani"), Udine.
 Subject: "Elements of the history of infinitesimal calculus: from Archimedes to
 the 17th century". 25 February 2019.
- 2019 Lesson addressed to the pupils attending the fifth (last) class of the high school, Liceo Artistico "Sello" (Art-Liceo "Malignani"), Udine. Subject: "Cantor and his mathematics of infinity". 29 February 2019.
- 2019 Course of lectures (10 hours) addressed to the teachers of History and Philosophy of the Liceo Marinelli, Udine. Title of the course: "Immagini, forme, oggetti ideali nel pensiero contemporaneo" ("Images, forms and ideal objects in contemporary thought"). Period: 18 October 2019 – 29 October 2019.
- 2019 Lecture within PLS (Progetto Lauree Scientifiche, Project Scientific Degrees) organized by DMIF (Department of Mathematics, Informatics, Physics, University of Udine) addressed to the teachers of Mathematics and Physics of the High Schools and Gymnasia. Title of the lecture: "I paradossi di Zenone" (Zeno's paradoxes). Date: 25 October 2019.
- 2019 Lesson within PLS (Progetto Lauree Scientifiche, Project Scientific Degrees) organized by DMIF (Department of Mathematics, Informatics, Physics, University of Udine). Lesson addressed to the pupils of the Liceo Artistico Sello, Udine. Title of the lessono: "Fenomeni astronomici e sistema tolemaico" (Astronomical phenomena and Ptolemaic system). Date: 25 October 2019.
- 2019 Lecture within PLS (Progetto Lauree Scientifiche, Project Scientific Degrees) organized by DMIF (Department of Mathematics, Informatics, Physics, University of Udine) addressed to the teachers of Mathematics and Physics of the High Schools and Gymnasia: Title of the lecture: "Storia della soluzione dell'equazione di terzo grado. Tra poesie e disfide matematiche" ("History of the third degree equation's solution. Bewteen poetries and mathematical challanges"). Date 13 December 2019.

- 2020 Lesson addressed to the pupils attending the fourth year of the Istituto Paschini-Linussio (liceo scientifico, scientific liceo) of Tolmezzo. Title: "Cantor e la sua matematica dell'infinito" ("Cantor and his mathematics of infinity"). Date: 17 January 2020.
- 2020 Plenary lesson to all the pupils attending the first year of the Istituto Malignani, liceo matematico (mathematical liceo), Udine. Title of the lesson: "Euclide e gli albori della geometria razionale" ("Euclid and the birth of rational geometry"). Date: 10 February 2020.
- 2020 Lecture at the "Scuola Superiore dell'Università di Udine" entitled "The importance of geometry for mathematics education: its conceps and history". Date 12 February 2020.
- 2020 Lecture at the Summer School of Philosophy "Orientarsi nel pensiero: tra Oriente e Occidente" ("Orientating in the thought: between East and West"), organized by DIUM, University of Udine, 17-21 June 2020. Title of my lecture: "The complex relation between evolution of science and philosophical convictions". Date: 17 June. (Online).
- 2020 Lecuture at the PhD University of Trieste University of di Udine "Storia delle società, delle istituzioni e del pensiero. Dal Medioevo all'età Contemporanea. Scienza, Saperi e Potere". Settimana didattica estiva 22-25 settembre ("History of Societies, institutions, thought. From the Middle Ages to the Contemporary Age. Science, Knowledge and Power". Summer didactic week, 22-25 September) Title of my lecture: "Il rapporto Bohr-Heisenberg e la fisica tedesca all'epoca del terzo Reich" ("The relation Bohr-Heisenberg and the German physics at the third Reich epoch). Date: 24 September. (Online).
- 2020 Seminar at the Department of Mathematics, University of Udine within the series "The seminars of DIMI (Department of Mathematics)". Title: "Il concetto di birapporto: significato matematico e origine storica" ("The concept of cross ratio: its meaning and historical origin". Date: 21 October. (Online).
- 2020 Seminar at the Department of Mathematics, University of Udine within the project PLS. Title. "The Antykithera mechanism and its modernity". Date: 23 December. (Online).

- 2021 Seminar at the Munich Centre for Mathematical Philosophy. Title: "The concept of cross ratio: mathematical meaning and historical origin". Date: 14 January. (Online).
- 2021 Three lessons at the Liceo Scientifico (Scientific Lyceum) "A. Volta" of Reggio Calabria organized by "Scuola di altra formazione Mario Alcaro" ("School of other formation Mario Alcaro") and by the Associazione Culturale Scholè ("Cultural Association Scholè"), Centro di Studi Filosofici ("Centre of Philosophical Studies"). Title of the lessons: "La rivoluzione scientifica del '600 letta attraverso le opere dei suoi protagonisti" ("The scientific revolution of the 17th century read through the works of the protagonists"). Dates: 1, 2, 3 March. (Online).
- 2021 Seminar at the Department of Mathematics, University of Udine within the project PLS. Title: "The priciple of the least action: the genesis of a law among physics, mathematics and metaphysics". Date: 17 March (Online).
- 2021 Lecture at the Summer School of Filosofia "Orientarsi nel pensiero: filosofia e mondi digitali" ("Orienting oneself in thought: philosophy and digital worlds" organized by the DIUM, University of Udine, 1-5 June 2020. Title of my lecture: "Il problema dei fondamenti della matematica tra fine XIX e inizio XX secolo". ("The problem of the foundations of mathematics between the end of the 19th Century and the beginning of the 20th Century"). (Online).
- 2021 Course for the teachers of the high schools entitled "Didattica della filosofia nei licei" ("The teaching of philosophy in the lycea"). 10 hours. The course was held at the Liceo Marinelli, Udine. Title of my lectures: "The fascination of infinity between philosophy and mathematics". Dates: 12 November (three hours); 16 November (two hours); 19 November (two hours); 26 November (three hours).
- 2021 Seminar for the Research Group "Synergia", research group in logic, language, cognition, history and philosophy of science, University of Urbino Carlo Bo. Title: "Gauss: il *Princeps Mathematicorum* e i suoi contributi alla teoria dei numeri". ("Gauss: the *Princeps Mathematicorum* and his contributions to the theory of numbers"). Date: 10 November. (Online).

- 2022 Lesson at the Liceo classico (Classical lyceum) Stellini of Udine within the PLS. Title: "L'astronomia di Tolomeo" ("Ptolemy's astronomy") (Online). Date 8 February. (Online).
- 2022 Initiative organized by the University of Udine "L'Università al Copernico. Lezioni di Filosofia. Lezioni-Dibattito tra scienza e filosofia rivolte alle studentesse e agli studenti delle classi terze e quarte del liceo scientifico N. Copernico, Udine". ("The University at the Copernico. Lessons of Philosophy. Lessons-Debate between science and philosophy for the students of the third and fourth year of the scientific lyceum N. Copernico, Udine"). Title of my lesson: "Il concetto newtoniano di moto e di forza. Il passaggio da una concezione cinematica del movimento a una dinamica". ("The Newtonian concept of of motion and force. The step from a kinematic conception to a dynamical one". Date 24 February. (Online).
- 2022 Three lessons at the Liceo Scientifico (Scientific Lyceum) "A. Volta" of Reggio Calabria organized by "Scuola di altra formazione Mario Alcaro" ("School of other formation Mario Alcaro") and by the Associazione Culturale Scholè ("Cultural Association Scholè"), Centro di Studi Filosofici ("Centre of Philosophical Studies"). Title of the lessons: "Il rapporto tra tecnica e teoria in tre grandi scienziati del XVII secolo: Galileo, Cartesio e Newton". ("The relation between technics and theory in three great scientists of the 17th century"). Dates 23, 24, 25 March. (Online).
- 2022 Training course "Didattica della filosofia nei licei" ("Didactics of philosophy in the lycea"). 15 hours. The course was held at the Liceo Marinelli, Udine. Title of my course: "Einstein's theory of relativity". Dates 8, 11, 15, 18, 30 March. (Online).
- 2022 Lesson to the students of the fourth and fifth year of the Liceo Copernico, Udine. Title: "Storia delle equazioni di terzo grado" ("History of teh third degree equations"). Le lesson was part of the Project PLS. (Online).
- 2022 Seminar as invited speaker by the SISFA (Italian Society of the Historians of Physics and Astronomy). Title: "Newton: the discoveries of the genius who revolutioned mathematics and physics". Date 18 October.

- 2022 Seminar at the Munich Centre for Mathematical Philosophy, Ludwig Maximilians Universität, Munich. Title: "The Development of the Complex Concept of Inertia in the 17th Century: Galileo, Descartes, Huygens and Newton". Date: 10 November (online).
- 2023 Lesson to all the students attending the fourth year of the Liceo Scientifico N. Copernico, Udine. This lesson was part of the iniziative "L'Università al Copernico 2022/2023: Incontri di Filosofia e Storia della Scienza". ("The University at the Copernico 2022/2023: Meetings of Philosophy and History of Science"). Title of my lesson: "Metodo sperimentale e matematica in Galileo: quale relazione?". ("Experimental method and mathematic in Galileo: what a relation?"). Date: 6 February.
- 2023 Seminar within the PLS to the high school teachres. Title: "Tolomeo, un genio universale: tra cosmologia, astronomia e geografia". ("Ptolemy, a universal genius: cosmology, astroniomy and geography"), Department of Mathematics, University of Udine. Date: 9 February.
- 2023 Lesson to the students attending the fourth of the Liceo Scientifico N. Copernico, Udine. The lesson was part of the PLS. Title: "La soluzione delle equazioni di terzo grado: una storia affascinante" ("The solution of the thirddegree equations. A fascinating history"). Date: 1 March.
- 2023 Lesson and laboratory-experience with the students attending the fourth year of the Liceo Pujati, Sacile. In the first part of the morning, I gave a lesson entitled "Claudius Ptolemy and the ancient astronomy". In the second part I explained the functioning of astrolabe. The students constructed an astrolabe and solved some easy exercise with this instrument. Date 3 April.
- 2023 Lesson to the students attending the fourth year of the scientific liceo Marinelli, Udine. Title: "Claudius Ptolemy and the ancient astronomy". Date 2 May.
- 2023 Laboratory at the Scuola Estiva di Altra Formazione in Filosofia "Remo Bodei", XIV edition, 22-29 July 2023, Roccella Jonica. Title of my laboratory: "Newton ed Einstein: due geni a confronto" ["Newton and Einstein: a comparison between two geniuses]. Date 28 July.

- 2023 Pubblic debate with Fortunato M. Cacciatore organized by the Scuola Estiva di Altra Formazione in Filosofia "Remo Bodei", XIV edition, 22-29 July 2023, Roccella Jonica. Title of the topic we have discussed: "Creare la natura. Storia del pensiero e genesi di un'idea" ["To create nature. History and origin of this idea"]. Date 28 July.
- 2023 Lecture at the Scuola Estiva di Altra Formazione in Filosofia "Remo Bodei", XIV edition, 22-29 July 2023, Roccella Jonica. Title of my lecture: "La concezione dello spazio fisico da Newton a Einstein" ["The conception of physical space from Newton to Einstein"]. Date 29 July.
- 2023 Lecture at the Scuola Estiva "Che resta dei Greci? Eredità attuali della Grecia antica", organized by DIUM, University of Udine. 4-8 September, Udine. Title of my lecture: "The modernity of Greek mathematics". Date 6 September.

Talks at and Organization of International Conferences and Meetings

- 2001 First SISM (Società Italiana di Storia delle Matematiche, Italian Society of history of Mathematics) Conference, 08-10.11.2001. Talk: "Il metodo fermatiano della discesa indefinita" ("Fermat's method of the infinite descent").
- 2003 International Centre for Scientific Culture "E. Majorana", School of Mathematics "G. Stampacchia", Erice June 20-July 1, 2003. Conference "Variational Analysis and applications". Talk: "Applications of Optimal Control Theory to Dynamic Soaring of Seabirds", together with Prof. Dr. Ing. Gottfried Sachs, Technische Universität, München.
- 2003 Annual Conference of the Deutsche Mathematiker-Vereinigung (German mathematical Society), 14-19 September, Rostock. Talk: "An approach to the indefinite descent".
- 2004 Annual Conference of the Deutsche Mathematiker-Vereinigung, 12-17 September, Heidelberg. Lecture: "Indefinite descent and methods of reduction".
- 2006 Talk at the Conference "Friedrich II von Hohenstaufen. Die Welt des Sultans

von Lucera", Landesmuseum Natur und Mensch, Oldenburg, Germany. Talk titled: "Leonardo Fibonacci and his *Liber Quadratorum*". 24 November.

- 2006 Conference "Federigo Enriques e la cultura europea", Leghorn-Paris 6-8 December. Talk titled: "La concezione enriquesiana della geometria e il formalismo di Hilbert" ("Enriques's conception of geometry and Hilbert's formalism").
- 2008 Conference "Kepler. La physique celeste", Strasbourg. Talk titled: "The circulation of the works by Kepler in Italy in the period 1595-1630" (I sent my relation that was read. I could not be present because of delays of the trains). 18-20 March.
- 2009 On 20th-23th. International Conference "Intensità e misure di grandezze intensive. Modelli e gerarchizzazione nell'ambito della storia e della filosofia della scienza", Villa Vigoni. Conference 20-23 May. My talk 21 May, title: "Fibonacci: tra storia e matematica" ("Fibonacci: between history and mathematics").
- 2012 Conference of SISFA (Società Italiana degli storici della fisica e dell'astronomia, "Italian Society of the historians of physics and astronomy"),
 Roma. Title of my talk: "The concept of force in Kepler". 28 September 2012.
- 2012 International Scientific-Practical Conference: Information and Communication Technology in Natural Science Education, University of Siauliai, Lithuania. Dates 8-9 November. On the 8th, talk as plenary speaker with Dr. Raffaele Pisano: "Open Problems in Mathematical Modelling and Physical Experiments: exploring Exponential Function".
- 2014 2nd International Scientific Conference on Philosophy of Mind and Cognitive Modelling in Education, May 26-28, Maribor, Slovenia. Title of my talk: "Mechanics, science and society in the Renaissance: what tradition?" Date: 26 May.
- 2014 6th International Conference of the European Society for the History of Science
 4-6 September, Lisbon. Title of my first talk: "*Congiunti* concept bodies in
 Torricelli's *Opera Geometrica*". Date: 5 September.
- 2014 6th International Conference of the European Society for the History of Science
 4-6 September, Lisbon. Title of my second talk: "Kepler's physical astronomy:

a scholarly tradition dating back to Alexandre Koyré". Date: 6 September.

- 2014 XXXIV Congresso Nazionale SISFA, Firenze 10-13 September. Title of my talk: "On Newton's *Principia* Jesuit Edition". Date: 13 September.
- 2014 23rd International Conference for Chemistry Education: Research, Theory and Practice on Chemistry Didactics – 9th IOSTE Symposium for Central and Eastern Europe: Science and Technology Education for the 21st Century. University of Hradec Králové (Czech Republic) 15-17 September. Title of my talk: "The Possible Role of History of Mathematics and Physics in Mathematics and Science Education". Date: 16th September.
- 2014 International Scientific Practical Conference: Information and Communication Technology in Natural Science Education – 23, 24 October 2014. University of Siauliai, Faculty of Education, Natural Science Education Research Centre, Siaulia, Lithuania. My talk as a plenary speaker on the 23th of October. Title: Federigo Enriques and his ideas on geometry education: how conceptions expressed at the beginning of the 20th century can be modern also today".
- 2015 Talk, as keynote speaker, at the 1st International Baltic Symposium on Science and Technology Education, University of Siauliai, Lithuania, 15-18 June. My talk entitled: "How history of mathematics can be used in mathematics education to teach differential and integral calculus", 15 June.
- 2015 Talk at the National Conference of the Italian Mathematical Union (UMI), 7-17 September, Siena. My talk: "La teoria planetaria di Leibniz" (Italian. Translation: "Leibniz's planetary theory"), 11 September.
- Talk at the Conference "Theatrum naturae et artis Leibniz und die Schauplätze der Aufklärung". Jahrestagung der Deutschen Gesellschaft für die Erforschung des 18. Jahrhunderts in Zusammenarbeit mit der Sächsischen Akademie der Wissenschaften, Leipzig, Germany, 28 September 1 October. Title of my talk: "Kepler's influence on Leibniz's planetary theory", 30 September.
- 2016 Talk at the Conference "Mathesis quaedam Divina seu Mechanismus Metaphysicus. Leibniz and the Sciences", Università Statale, Milano 7-8 October. Title of my talk: "The influence of Kepler on Leibniz's planetary theory", 8 October.
- 2017 Talk as Keynote Speaker at the Conference "Arguments par parallélisme et

ressemblance. Exemplification, symétrie et analogie : Approches conceptuelles et didactiques", 2017, MESHS, Lille, France. Title of my talk: "Reading the Use of Analogies in Newton's *Philosophiae Naturalis Principia Mathematica*", 12 May.

- 2017 Talk at the Congress "Knowledge-Based Migration" organised by the Italian Association "Alexander von Humboldt", Pavia, 16-18 November. Title of my talk: "Knowledge migration: Albert Einstein in the USA. The reception of his personality in America and his scientific work in Princeton", 17 November.
- 2019 XXXIX Congress of the Italian Society for the History of Physics and Astronomy, Pisa, 9-12 September 2019. Title of my talk: "Newton's Geneva Edition: some Considerations on the Integral Calculus". Date: 12 September 2019.
- Workshop on History of the Scientific Thought, University of Roma Tre –
 Pontificia Università Lateranense "La scienza e i sistemi del mondo prenewtoniani" ("The Science and the pre-Newtonian systems of the world").
 4-5 December 2019. Title of my talk: "Il concetto di inerzia in Newton e negli autori precedenti" ("The of inerzia in Newton and in the preceding authors").
 Date: 5 December 2019.
- 2020 ESOF 2020. Euroscience Open Forum, Science in the City Festival, Trieste. Talk entitled "L'attualità del meccanismo di Anticitera", "Modernity of Antikythera mechanism". Date: 13 August 2020.
- XL Congress of the Italian Society for the History of Physics and Astronomy,
 8-10 settembre. Title of my talk: "On the Proposition LXVI, Book I, *Principia* Newton, Geneva Edition". Date: 9 September 2020.
- 2020 XL Congress of the Italian Society for the History of Physics and Astronomy,
 8-10 September. Title of my relation: "On the Proposition LXVI, Book I,
 Principia Newton, Geneva Edition". Date: 9 September. (Online).
- Fourth International Baltic Symposium on Science and Technology Education.
 Title: Science and Technology Education: Developing a Global Perspective,
 21-22 giugno. Title of my relation: "A New Perspective on Mathematics
 Education coming from History: the Example of Integral Calculus". Date: 21
 June. (Online).

- XLI Congress of the Italian Society for the History of Physics and Astronomy,
 6-9 September. Title of my talk: "Kepler's astronomy: an interplay between kinematics and dynamics". Date: 7 September.
- Talk at the conference: "La Scienza/ Le Scienze" ("The Science/The Sciences"), organinized by Dr. Gabriele Pulcini, University of Roma Tor Vergata. Partecipants: Prof. Mario Piazza (Scuola Normale Superiore, Pisa); Dr. Paolo Bussotti (University di Udine); Prof. Luigi Longo (École Normale Supérieure de Paris). Title of my talk: "La fisica del '600 tra Galileo e Newton" ("The physics of the 17th Century between Galileo and Newton"). Date: 16 May.
- XLII Congress of the Italian Society for the History of Physics and Astronomy,
 26-29 September. Title of my talk: "The concept of inertia in Huygens. Date 27
 September.
- 2023 Member of the Scientific Committee of the 5th International Baltic Symposium on Science and Technology Education (BalticSTE 2023) "Science and Technology Education: New Developments and Innovations", Šialiai, Lithuania, 12-15 June, 2023.
- Talk as Keynote speaker at the 5th International Baltic Symposium on Science and Technology Education (BalticSTE 2023) "Science and Technology Education: New Developments and Innovations", Šialiai, Lithuania, 12-15 June, 2023. Title of my talk: "Introducing the Concept of Energy: Educational and Conceptual Considerations". Date: 14 June.
- 2023 XLIII Congress of the Italian Society for the History of Physics and Astronomy, 5-8 September. Title of my talk: "What means that the book of nature is written in mathematical characters?" Padova. Date of my talk: 5 September.
- 2023 Member of the Organizing Board and of the Scientific Board of the International Symposium "Newton & Newton's Philosophiae Naturalis Principia Mathematica Geneva Edition ([1739-1742]1822)". 22-23 September, Oxford.

2023 Relation as Plenary Speaker at the International Symposium "Newton & Newton's Philosophiae Naturalis Principia Mathematica Geneva Edition ([1739-1742]1822)". 22-23 September, Oxford. Title of my talk: "Conceptual Frameworks from Newton's Principia and Newton Principia Geneva Edition (1687[1739-1742]1822): Cases-Studies and Analysis of the Problem of Isochronism, Proposition LIII". Date: 22 September.

OTHER RELATED ACTIVITIES

- 1995-2007 Member of the editorial staff of the six-monthly journal "Confronto, riflessioni sui modelli di sviluppo". (Subject: sociology, economy). ISSN 1129-2229.
- 1997-1998 Researcher at the "Biblioteca Labronica di Livorno" (Provincial Library of Livorno) for the compilation of a commented catalogue of the newspapers and journals published in Livorno in the period 1871-1886.
- 1998-2000 Researcher at the "Biblioteca Labronica di Livorno" for the translation from Latin into Italian of the *Sidereus Nuncius* by Galileo Galilei.
- 2001-2002 Researcher at the "Centro Studi Enriques, Livorno" for the study of Enriques's scientific library.
- Since 2012 Member of the Editorial & Review Board of the international scientific journal *Problems of Education in the 21st Century*, ISSN 1822-7864.
- Since 2013 Member of the Editorial & Review Board of the international scientific journal AHS, *Advances in Historical Studies*, ISSN Print: 2327-0438; ISSN Online: 2327-0446.
- Since 2013 Member of the Editorial & Review Board of the international scientific journal Journal of Baltic Science Education, ISSN 1648-3898.
- Since 2013 Member of the Editorial & Review Board of the international scientific journal *History Research*, ISSN 2159-550X.
- Since 2015 Reviewer of the American Mathematical Society.
- Since 2016 Reviewer of the Zentralblatt für Mathematik.
- Since 2022 Peer reviewer of the international scientific journal Foundations of Science.

OTHER CULTURAL ACTIVITIES

Positions

- 2010-2018 President of the AALSciTec ("Associazione delle Associazioni livornesi per la scienza e la tecnologia". English: "Association of the Associations of Livorno in favour of science and technology").
- Since 2010 Member of the directing bureau of the Cultural Association "Caffé della Scienza, Nicola Badaloni", Livorno.

Talks given at and organization of congresses, conferences, meetings, lectures

- 2001 Biblioteca Labronica di Livorno, series "Meetings with the book". Talk: "Galileo Galilei: *Sidereus Nuncius*". 27 Februar 2001.
- 2002 Conference "Enriques e Severi. Matematici a confronto nella cultura del Novecento". Talk: "Matematica e filosofia. Il caso della geometria proiettiva" ("Mathematics and philosophy. The example of projective geometry").
- 2006 Lecture titled "L'insegnamento della geometria proiettiva in Enriques e Castelnuovo" ("The teaching of projective geometry in Enriques and Castelnuovo"). This lecture was given inside the Seminar for high school teachers organized by CRED (Centro Risorse Educative e Didattiche) and by Centro Enriques, Livorno.
- 2006 Talk "1600: il quattrocentenario di Fermat e di Livorno" ("1600: the 400 years of Fermat and of Leghorn"). This talk was given inside the cicle "Primavera della Scienza" organized by the Comune di Livorno. April.
- Talk titled "Empowerment tra psicoanalisi e filosofia" ("Empowerment between psychoanalysis and philosophy"), Sixth National Conference of Psycosomatic.
 7th-8th October 2006, Livorno.
- 2006 Lesson at the Liceo Scientifico Barsanti, Viareggio titled "Georg Cantor e la sua matematica dell'infinito" ("Georg Cantor and his mathematics of the infinite"). 16 November.
- 2006 Conference "Editori, tipografi e Lumi. La stampa a Livorno dal 1644 al 1830", at Labronic Library, Livorno. Talk titled "Le note scientifiche e geografiche dell'edizione livornese dell'Encyclopedie" ("The scientific and geographical

notes of *Encyclopedie*'s edition printed in Leghorn"). 1 December.

- 2007 Conference titled: "La natura del numero" ("The nature of numbers") inside "Pianeta Galileo", organized by Regione Toscana, at Labronic Library, Leghorn. 14 November.
- 2008 Presentation of the documentary on the life of Enriques "Le armonie nascoste: Federigo Enriques e la cultura europea", at the cinema Lumière, Pisa. 18 April.
- 2009 Organizer and speaker at the workshop "L'evoluzionismo: aspetti storici e scientifici" ("The evolutionism: historical and scientifical aspects"), at Liceo Francesco Cecioni, Livorno. 30 March.
- 2009 Presentation of the book *Bruno de Finetti: un matematico scomodo*, Livorno.9 May.
- 2010 Coorganizer of the Annual Conference of the Mathesis (The Italian association of the teachers of mathematics and physics), Livorno, at Accademia Navale. 15-17 April. On 17th talk titled: "L'insegnamento della geometria euclidea e proiettiva in Enriques" ("The teaching of Euclidean and projective geometry in Enriques").
- 2011 Organizer of the Conference "La divulgazione della cultura scientifica a Livorno: gli aspetti storici e la situazione attuale" ("The popularization of scientific culture in Leghorn: historical aspects and present situation"), Accademia Navale, Livorno. My talk: "La stampa periodica livornese nel primo quarantennio postunitario: il quadro generale e i contenuti scientifici" ("The periodicals in Leghorn in the first 40 years after Italian unification: the general picture and the scientifical contents"). 30 March.
- 2011 Talk at the Caffè della Scienza, Livorno. Title: "L'insegnamento matematico di Vittorio Checcucci" ("Vittorio Checcucci's mathematical teaching"). 7 October.
- 2011 Lecture: "Storia e uso dell'astrolabio" ("History and use of the astrolabe") at the Istituto Nautico, Livorno. Inside cultural event "Pianeta Galileo", organized by Regione Toscana. 18 November.
- 2012 From the 6th to the 13th May: organizer of the exposition concerning Japanese mathematics: "San Gaku. Tra arte e scienza, la matematioca tradizionale giapponese nel periodo Edo" ("San Gaku: between art and science, the

traditional Japanese mathematics in the Edo period"). Inside the exposition, on the 8th, talk: "Geometria, intuizione e insegnamento della matematica in due grandi livornesi: Federigo Enriques e Vittorio Checcucci". ("Geometry, intuition and didactics of mathematics in two great mathematicians of Leghorn: Federigo Enriques and Vittorio Checcucci").

- 2012 Plenary lesson at the Liceo Classico Niccolini-Guerrazzi (Classic high school), Livorno on the subject "Galileo e la nascita della fisica moderna" ("Galileo and the birth of modern physics"). 2 November.
- 2013 Conference at the Istituto Tecnico Galileo Galilei (Technical high school), Livorno. Title: "Il problema delle longitudini" ("The problem of the longitudes"), together with professors Paolo Paolicchi and Umberto Penco, Department of Physics, University of Pisa. 20 March.
- 2013 Talk, together with Professor Marco Massai, at the meeting: "Scienziati per caso: da Galileo a Fermi. Il percorso scientifico degli scienziati nelle loro scoperte fatte per caso". ("Scientists by chance: from Galileo to Fermi. The scientific *iter* of the scientists in their discoveries obtained by chance"). Meeting organized by the Cultural Associations "Caffè della Scienza", Livorno and "La Limonaia", Pisa. Livorno, 17 September.
- 2013 Organizer and presenter of the meeting "Bruno Pontecorvo: la vita e l'opera di un grande scienziato rappresentata in un film-documentario" ("Bruno Pontecorvo: the life and the work of a great scientist represented in a documentary movie"). Museo Provinciale di Storia Naturale del Mediterraneo, Livorno. 27 November.
- 2014 Talk titled: "Matematica e filosofia in Federigo Enriques" ("Mathematics and Philosophy in Federigo Enriques"). Organized by "Caffé della Scienza", Livorno. 26 March.
- Presentation of the talk given by Professor Dr. Luciano Modica (former Rector of Pisa University) titled "La matematica nelle scuole superiori: indagine P.I.S.A. e test valutazione; attuali metodi didattici" ("Mathematics at the high school: P.I.S.A. enquiry and valutation tests; modern didactical methods"), Biblioteca Labronica, Livorno, organized by the cultural association Caffè della Scienza "Nicola Badaloni". Date: 12 April.

- 2014 Presentation and organization of "Meeting with the author: Pietro Greco", writer and scientific journalist, author of the book *Galileo, l'artista toscano*. Book shop Gulliver, Livorno. Date: 12 May.
- 2014 Talk titled: "Galileo e Keplero: due scienziati a confronto" ("Galileo and Kepler: a comparison between two scientists"), Nuovo Teatro delle Commedia, Livorno. Organization Caffè delle Scienza "Nicola Badaloni". Talk inserted inside la "Primavera della Scienza", series of cultural meetings by the Comune di Livorno. Date: 09 giugno.
- 2014 Organization and presentation of the lecture addressed by Prof. Ciro Ciliberto to the students of the Naval Academy, Livorno. Title of Ciliberto's lecture: "Federigo Enriques nella matematica e nella cultura" (translation: Federigo Enriques in mathematics and culture). Title of my presentation: "Federigo Enriques come figura europea" (Translation: Federigo Enriques as European figure). Date 15 October.
- 2014 Talk at the Caffé della Scienza, Livorno: "Un interessante caso storiografico e scientifico, 1739-1742: l'edizione svizzera dei *Philosophiae Naturalis Mathematica Principia* di Newton" (translation: "an interesting historiographic and scientific case", 1739-1742: the Swiss Edition of the *Philosophiae Naturalis Mathematica Principia* by Newton"). Date 29 October.
- 2015 Interview at the Caffè della Scienza, Livorno with Professor Guido Perin concerning the book G. Perin – I. Haberl, *Conversazioni sul senso della vita*. *Strategia e ricatto della genesi* (Italian. Translation: *Conversations on the sense of the life. Strategy and blackmail of the genesis*), 7 April.
- 2015 Talk entitled *Matematica tradizionale giapponese durante il periodo Edo* (Italian. Translation: *The traditional Japanese mathematics in the Edo period*). This talk is a part of a vast cultural event organised by the Municipalities of Pisa and Livorno and by the University of Pisa in October and November 2015, entitled 70-esimo anniversario dei bombardamenti di Hiroshima and Nagasaki (The 70th anniversary of Hiroshima and Nagasaki bombing). My talk 14 November.
- 2016 Talk-Lecture entitled "G. Galilei, Dialogo sopra i due massimi sistemi del mondo, 1632" at the Fondazione "Dino Terra", Lucca. The talk-lecture was composed of an introduction on the figure of Galileo and on the importance of

the "Dialogo". In the second part, I read and explained a series of passages of the "Dialogo". Date: 11 February.

- 2016 Talk-Lecture entitled "I. Newton, Philosophiae Naturalis Principia Mathematica, 1687", at the Fondazione "Dino Terra", Lucca. The talk-lecture was composed of an introduction on the figure of Newton and on the importance of the "Principia". In the second part, I read and explained a series of passages of the "Principia". Date: 25 February.
- 2016 Talk entitled: "Astronomia del '600: idee innovative. La teoria planetaria di Leibniz" (Astronomy in the 17th century: new ideas. Leibniz's planetary theory), Caffè della Scienza "Nicola Badaloni", Livorno. Date: 8 June.
- 2017 Talk entitled: "Il concetto di spazio assoluto nella fisica di Newton" (Italian. Translation: "The concept of absolute space in Newton's physics"), Caffè della Scienza "Nicola Badaloni", Livorno. Date: 23 January.
- 2017 Talk entitled: "The Nazism and its historical period", within the Conference "Copenaghen: Fisica del Novecento in una società in Guerra" ("Copenaghen: the 20th century Physics in a in-war society"), organised by the University of Udine and by the CSS ("Teatro Stabile di Innovazione del Friuli Venezia Giulia"), Udine. Date 16 October.
- 2018 Presentation of the two books "Là dove il pensiero incontra l'esperienza" ("Where thought meets experience"), School ISI, Barga. Date 28 February.
- 2019 Talk entitled: "I paradossi di Zenone. Aspetti storici e concettuali" ("Zeno's paradoxes. Historical and conceptual aspects"). Caffè della Scienza "Nicola Badaloni", Livorno. Date: 16 March.
- 2020 Talk entitled "Le geometrie non euclidee e il nostro concetto di spazio" ("The non Euclidean geometries and our concept of space"). Caffè della Scienza "Nicola Badaloni", Livorno. Date 31 January.
- 2021 Talk entitled: "Il meccanismo di Anticitera e la sua modernità" ("The Anthykithera mechanism and its Modernity"). Caffè della Scienza "Nicola Badaloni", Livorno. Date 22 January. (Online).
- 2023 Conference in Livorno organizzed by the Liceo Scientifico F. Enriques. Title of the Conference: "Portrait of Federigo Enriques". Title of my talk: "Mathematics and philosophy in Federigo Enriques, a fascinating conceptual net". Date: 27 March.
- 2023 Talk-presentation of the book Paolo Bussotti-Brunello Lotti Cosmology in the

early modern age: a web of ideas, Springer, 2022. Event organized by Caffè della Scienza "Nicola Badaloni" at the "Museo della città", Livorno. Talks by Brunello Lotti and Paolo Bussotti. Date 30 May.

Upcoming Editorial Activity connected to Research

 2015-2028 (with Prof. Dr. Raffaele Pisano). *Philosophiae Naturalis Principia Mathematica* by Isaac Newton. Edited by Le Seur and Jacquier (1739-1742). So (wrongly) called "Jesuit Edition". The work will be in 5 Volumes. Four of them will include Full Transcription and Translation from Latin into English. No English translation exists of the notes by Le Seur and Jacquier, which are longer than Newton's text itself. One volume will explain our researches on this edition. Project already approved by The Oxford University Press, Oxford, England. The contract has been signed in December 2014.

INTERVENTIONS IN TELEVISION

- 2020 March: Intervention at TG of Telegranducato (Livorno). I had to explain in the context of the first pandemic phase COVID – the meaning and the functioning of the exponential function.
- 2021 March: Intervention in the program "Elementi" ("Elements") of Telegranducato (Livorno) in order to explain the concept of algorithm.

PRIZES AND AWARDS

Award as reviewer: Certificate of Reviewing "in recognition of a valuable contribution to the quality of the academic journal", for the *Journal of Baltic Science Education*, ISSN 1648-3898 (printed version); ISSN 2538-7138 (online version). Year 2020.

Award as reviewer: Certificate of Reviewing "in recognition of a valuable contribution to the quality of the academic journal", per il Journal of Baltic Science Education, ISSN 1648-3898 (printed version); ISSN 2538-7138 (online version). Year 2021.