

Paolo Bussotti

Curriculum Vitae et Studiorum

List of publications

Personal data	p. 2
Contact details	p. 2
Qualifications	pp. 2-3
Languages	p. 3
Main Research Areas	pp. 3-4
Academic Affiliations	p. 4
Academic Activities	pp. 4-5
Other Qualifications	p. 5
Given Lectures and Seminars	pp. 5-7
Talk at International Conferences and Meetings,	pp. 7-9
Other Related Activities,	p. 10
Other Cultural Activities,	pp. 11-15
Positions held,	p. 11
Talks given at and organization of congresses, conferences, meetings, lectures,	pp. 11-15
Editorial Activity Connected to Research,	pp. 15-16
List of publications,	pp. 17-28
1. Books,	p. 17
2. Edited books,	pp. 17-18
3. Translations,	p. 18
4. Journal articles,	pp. 18-24
5. Books chapters,	pp. 24-27
6. Other scholarly works,	p. 27
7. Reviews,	p. 27
8. Published abstracts,	p. 28
9. Posters.	p. 28

Paolo Bussotti

CURRICULUM VITAE ET STUDIORUM

PERSONAL DATA

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

CONTACT DETAILS

via P. Lilla, 66, 57122, Livorno, Italy

phone: 0039(0)586403022

cell: 00393347551226

e-mail: personal: paolobussotti66@gmail.com

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.

NB: Since 2012, the *Abilitazione* is necessary to hold a professorship in the Italian universities.

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:

- 1) *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).
- 2) *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 *Encyclopédie*

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)

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. Period June-August 2005.
- 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.

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.

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 possible 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 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 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.

Talks at 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, Siauliai, 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.
- 2016 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.

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*.

OTHER CULTURAL ACTIVITIES

Positions held

- 2002 Teacher of History and Philosophy at the “Liceo Scientifico F. Enriques”, Livorno. From February to June.
- Since 2010 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.
- 2014/2015 Teacher of History and Philosophy at the “Liceo Scientifico F. Enriques”, Livorno. From October to June.

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.
- 2006 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 scientific 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 scientific 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 matematica 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 "Caffè della Scienza", Livorno. 26 March.
- 2014 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 valuation tests; modern didactical methods”), Biblioteca

- Labronica, Livorno, organized by the cultural association Caffè della Scienza “Nicola Badaloni”. Date: 12 May.
- 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 Caffè 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 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 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 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 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.

Upcoming Editorial Activity connected to Research

1. 2015-2020 (with 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

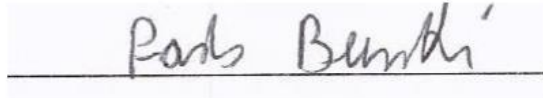
than Newton's text itself. One volume will explain our researches on this edition. Project already approved by The Oxford University Press, Oxford, England. The contract has been signed in December 2014.

Updated

23 November 2016

Signature

Paolo Bussotti

A handwritten signature in cursive script, reading "Paolo Bussotti", is written on a light blue horizontal line. The signature is centered and appears to be a scan of a document.

List of Publications

1. Books

1. Bussotti, P., 1994, *Periodici livornesi dal 1861 al 1870*, (Italian. Translation: “Periodicals published in Livorno in the period 1861-1870”), Comune di Livorno.
2. Bussotti, P., 1997, *Giuseppe Veronese e i fondamenti della matematica*, (Italian. Translation: “Giuseppe Veronese and the foundations of mathematics”), Pisa, ETS.
3. Bussotti, P. (in collaboration with S. Paolini), 1997, *Pierre de Fermat e la discesa indefinita* (Preface by Imre Toth), (Italian. Translation “Pierre de Fermat and the infinite descent”), Pisa, ETS.
4. Bussotti, P., 2000, *Periodici livornesi dal 1871 al 1886*, (Italian. Translation: “Periodicals published in Livorno in the period 1871-1886”), Comune di Livorno.
5. Bussotti, P., 2006, *From Fermat to Gauss: indefinite descent and methods of reduction in number theory*, Rauner Verlag, Augsburg.
6. Bussotti, P., 2006, “*Un mediocre lettore*”; *le letture e le idee di Federigo Enriques*, (Italian. Translation: “A mediocre reader; the readings and the ideas of Federigo Enriques”), Agorà publishing, Lugano.
7. Bussotti, P., 2008, *Problems and methods at the origin of the theory of numbers*, Accademia Pontaniana, Napoli.
8. Bussotti, P. (In collaboration with A. Scimone), 2009, *Sulle orme di Fermat. Il teorema dei numeri poligonali e la sua dimostrazione*. (Italian. Translation: “On Fermat's traces. The polygonal number theorem and its demonstration”), Agorà publishing, Lugano.
9. Bussotti, P., 2015, *The Complex Itinerary of Leibniz's Planetary Theory: Physical Convictions, Metaphysical Principles and Keplerian Inspiration*, Springer-Birkhäuser Verlag, Basel.

2. Edited books

1. *Federigo Enriques e la cultura europea* (Italian. Translation: “Federigo Enriques and the European culture”), Agorà publishing, Lugano, 2008.

CONTRIBUTORS: Ciro Ciliberto, Giorgio Bolondi, Enrico Castelli Gattinara, Paolo Bussotti,

Ferdinando Abbri, Tina Nastasi, Mario Castellana, Gaspare Polizzi, Jean Petitot, Imre Toth, Eric Eméry.

2. *Geometria, intuizione, esperienza* (Italian. Translation: “Geometry, intuition, experience”), PLUS, Pisa, 2010.

CONTRIBUTORS: Paolo Bussotti, Michel Bitbol, Giuseppe Longo, Jean Petitot, Paolo Parrini, Ornella Pompeo Faracovi, Fabio Minazzi, Gaspare Polizzi, Alberto Peruzzi.

3. Translations

1. Galileo Galilei, *Sidereus Nuncius*. Translation from Latin into Italian with commentary and postface, Pacini, Pisa, 2001.

4. Journal articles

1. Bussotti, P., 1997, La concezione del numero di Bolzano nella *Reine Zahlenlehre*, (Italian. Translation: “Bolzano’s concept of number in the *Reine Zahlenlehre*”), 1997, in *Le scienze e il loro insegnamento*, XXXIV, 1-2, pp. 81-91.
2. Bussotti, P., 1997, Alcune note sulla gnoseologia husserliana della *Philosophie der Arithmetik*, con particolare riferimento al concetto di numero, (Italian. Translation: “Some notes concerning Husserl’s gnoseology of *Philosophie der Arithmetik* particularly with regard to the concept of number”), in *Teoria*, XVII, 2, pp. 119-133.
3. Bussotti, P., 1997, Il significato sociale del pensiero di Wittgenstein e Husserl, (Italian. Translation: “The social meaning of Wittgenstein’s and Husserl’s thought”), in *Confronto*, VI, pp. 39-55.
4. Bussotti, P., 1998, Il problema dei fondamenti della matematica negli scritti giovanili di Bernhard Bolzano, (Italian with a summary in English. Translation: “The problem of foundations of mathematics in the early works of Bernhard Bolzano”), in *Epistemologia*, XXI, n. 2, pp. 225-244.
5. Bussotti, P., 2000, Aritmetica e aritmetizzazione. La via indicata da Gauss e Kronecker, (Italian with a summary in English. Translation: “Arithmetic and arithmetization. The way indicated by Gauss and Kronecker”), in *Epistemologia* XXIII, pp. 23-50.
6. Bussotti, P., 2000, Il problema dei fondamenti della matematica all’inizio dell’Ottocento. Due linee di pensiero: Bolzano e Gauss, (Italian. Translation: “The problem of foundations of mathematics at the beginning of the 19th century. Two lines

- of thought: Bolzano and Gauss”), in *Teoria*, XX/1, pp. 83-95.
7. Bussotti, P., 2000, “Ogni numero primo della forma $4n+1$ è la somma di due quadrati”: storia dei metodi dimostrativi usati per provare un teorema, (Italian with a summary in English. Translation: “Every prime number of the form $4n+1$ is the sum of two squares: history of demonstrative methods used to prove a theorem”), in *L'insegnamento della matematica e delle scienze integrate*, 23A, pp. 27-63.
 8. Bussotti, P., 2000, Un tema fondamentale del pensiero scientifico e filosofico: il continuo visto come limite del discreto, (Italian. Translation: “A fundamental theme of the scientific and philosophical thought: the *continuum* seen as a limit of the discrete”), in *Confronto*, XI, pp. 135-147.
 9. Bussotti, P., 2001, La figura di Galilei e l'importanza del *Sidereus Nuncius* all'inizio del Seicento, (Italian. Translation. “The figure of Galilei and the importance of the *Sidereus Nuncius* at the beginning of the 17th century”), in *Rivista del Comune di Livorno*, n. 33, pp. 44-58.
 10. Bussotti, P., 2001, Considerazioni sul concetto di scienza, (Italian. Translation: “Reflections on the concept of science”), in *Sentieri*, I, n. 1, pp. 83-88.
 11. Bussotti, P., 2001, I problemi geometrici classici non risolvibili con riga e compasso, (Italian. Translation: “The classical geometrical problems which cannot be solved by rule and compass”), 2001, in *Nuova Secondaria*, 10, 15 June 2001, pp. 53-54 and 59-64; 3, 15 November 2001, pp. 101-108.
 12. Bussotti, P., 2001, Nuovi algoritmi per decomporre particolari classi di numeri primi in somme di quadrati e per decomporre ogni numero in n numeri poligonali di n angoli, con $n > 3$, (Italian with an English summary. Translation: “New algorithms to decompose particular classes of prime numbers in the sum of squares and to decompose every number in the sum of n polygonal numbers with n angles, $n > 3$), in *L'insegnamento della matematica e delle scienze integrate*, April, pp. 165-183.
 13. Bussotti, P., 2002, Alcuni aspetti del pensiero di Federigo Enriques e la nascita del centro Enriques (Italian. Translation: “Some aspects of Federigo Enriques's thought and the birth of the Centro Enriques”), in *Rivista di storia della filosofia*, 4, pp. 621-625.
 14. Bussotti, P., 2002, I giornali livornesi nel periodo 1861-1900, (Italian. Translation: “The periodicals published in Livorno in the period 1861-1900”) in *Rassegna Storica Toscana*, XLVIII, 2002, 1, pp. 249-260.

15. Bussotti, P. (In collaboration with D. Palladino), 2002, Il principio di induzione 1. Storia e ruolo, (Italian. Translation: “The principle of mathematical induction 1. History and role”), in *Nuova Secondaria*, 2, 15 October 2002, pp. 41-51.
16. Bussotti P. (In collaboration with L. Bussotti), 2002, Le basi culturali dell’etnocentrismo occidentale, (Italian. Translation: “The cultural bases of the Western ethnocentrism”), in *Confronto*, VIII, 15, pp. 11-36.
17. Bussotti, P., 2003, La teoria aritmetica di Euclide, (Italian. Translation: “The arithmetical theory of Euclid”), in *Nuova Secondaria*, 5, 15 January 2003, pp. 84-89.
18. Bussotti, P., 2003, L’aritmetica di Diofanto, (Italian. Translation: “The arithmetic of Diophantus”), in *Nuova Secondaria*, 8, 15 aprile 2003, pp. 79-84.
19. Bussotti, P., 2003, The origin of the Lagrange multipliers, in *Journal of optimization theory and applications*, July 2003, pp. 455-459.
20. Bussotti, P., 2003, Il contributo di Fibonacci alla teoria dei numeri.1, (Italian. Translation: “Fibonacci’s contribution to number theory. 1”), in *Nuova Secondaria*, 3, 15 November 2003, pp. 77-80.
21. Bussotti, P., 2004, Il contributo di Fibonacci alla teoria dei numeri.2, (Italian. Translation: “Fibonacci’s contribution to number theory. 2”), in *Nuova Secondaria*, 6, 15 February 2004, pp. 83-86.
22. Bussotti, P., 2004, L’opera aritmetica di Francesco Maurolico, (Italian. Translation: “Francesco Maurolico’s arithmetical work”), in *Nuova Secondaria*, 7, 15 March 2004, pp. 79-83.
23. Bussotti, P., 2004, Viète e Bachet: le ricerche sui numeri tra ‘500 e inizio del ‘600, (Italian. Translation: “Viète and Bachet: the research on the numbers between the 16th and the 17th century”), in *Nuova Secondaria*, 9, 15 May 2004, pp. 81-87.
24. Bussotti, P., 2004, Il Triangulus Arithmeticus di Pascal, (Italian. Translation: “Pascal’s Triangulus Arithmeticus”), in *Nuova Secondaria*, 2, 15 October 2004, pp. 75-81.
25. Bussotti, P., 2004, Geschichte der Zahlentheorie. Der “unendliche Abstieg” von Fermat bis Gauss, (German. Translation: “History of number theory: the *infinite descent* from Fermat to Gauss”), in *Humboldt Kosmos*, 84, December 2004, p. 37.
26. Bussotti, P., 2006, La crisi del concetto di causa nelle scienze esatte tra XIX e XX secolo, (Italian. Translation: “The crisis of the cause-concept in exact sciences between the XIX

- and the XX century”), in *Rivista della Scuola superiore dell'economia e delle finanze*, III, n. 3, marzo 2006, pp. 50-87.
27. Bussotti, P., 2006, La teoria dei numeri di Fermat e i suoi segreti, (Italian. Translation: “Fermat's number theory and its secrets”), in *Rivista della Scuola superiore dell'economia e delle finanze*, maggio 2006, web page: www.rivista.ssef.it/.
 28. Bussotti, P., 2006, La teoria dei numeri di Fermat e la discesa indefinita, (Italian. Translation: “Fermat's number theory and indefinite descent”), in *Nuova Secondaria*, 10, 15 giugno 2006, pp. 103-112.
 29. Bussotti, P., 2007, Il concetto di archetipo in Jung: origine, significato e rapporto con le altre scienze, (Italian. Translation: “The concept of archetype in Jung: origin, meaning, and relation to other sciences”), in *Sentieri*, VII, pp. 81-101.
 30. Bussotti, P., 2008, Il concetto di progresso in matematica, (Italian. Translation: The concept of progress in mathematics), in *Leussein. Rivista di studi umanistici*, Anno I, n. 2, pp. 51-94.
 31. Boockmann, F. - Bussotti, P. - Di Liscia, D. - Oestmann, G., 2008, Nicht das Kind mit dem “Badt aussschuetten”. Die Astrologie dei Kepler, Rantzau und Galilei, in *Akademie aktuelle* (journal of the Bavarian Academy of Sciences), pp. 51-60, 04/2008.
 32. Bussotti, P. (In collaboration with C. Tapp), 2009, The influence of Spinoza’s concept of infinity on Cantor’s set theory, in *Studies in History and Philosophy of Science*, 40, 1, pp. 25-35.
 33. Bussotti, P. (In collaboration with A. Scimone), 2009, Tutto è poligonale! Storia secolare ma a lieto fine di un “mistero numerico” di Fermat (Italian. Translation: “Everything is polygonal: centuries old but happy ending history of a numerical mystery by Fermat”), in *Lettera Matematica Pristem*, first part, 72, pp. 41-48, second part, 73, pp. 47-52.
 34. Bussotti, P., 2009, Distanze terrestri, distanze celesti: la misurazione del mondo, (Italian. Translation: “Terrestrial distances, celestial distances: the measurement of the universe”), in *Leussein. Rivista di studi umanistici*, II, 3, pp. 7-30.
 35. Bussotti, P., 2012, Federigo Enriques e la didattica della matematica (Italian. Translation: “Federigo Enriques and mathematics education”), in *Euclide. Giornale di matematica per i giovani*. Electronic journal. First part February 2012, second part April 2012. web site: <http://www.euclide-scuola.org/>.

36. Bussotti, P. (In collaboration with R. Pisano), 2012, Galileo and Kepler: On Theoremata Circa Centrum Gravitatis and Mysterium Cosmographicum, in *History Research*, Volume 2, Number 2, February 2012, pp. 110-145.
37. Bussotti, P., 2012, History and didactics of mathematics: a problematic relation. Some considerations based on Federigo Enriques's ideas, in *Problems of Education in the 21th Century*, 48, 2012, pp. 5-9.
38. Bussotti, P. (In collaboration with R. Pisano), 2012, Open problems in mathematical modelling and physical experiments: exploring exponential function, in *Problems of Education in the 21th Century*, 50, 2012, pp. 56-69.
39. Bussotti, P., 2013, Vittorio Checcucci and his contributions to mathematics education: a historical overview, in *Problems of Education in the 21th Century*, 53, pp. 22-39.
40. Bussotti, P. (In collaboration with R. Pisano) 2013, On the Conceptual and Civilization Frames in René Descartes' *Physical Works*, in *Advances in Historical Studies*, Vol. 2, No. 3, pp. 106-125. Published Online September 2013 in SciRes (<http://www.scirp.org/journal/ahs>).
41. Bussotti, P., 2013, A possible role for history of mathematics and science in mathematics and science education, in *Journal of Baltic Science Education*, 12 (6), pp. 712-715.
42. Bussotti, P. (In collaboration with R. Pisano), 2013, On popularization of Scientific Education in Italy between 12th and 16th Century, in *Problems of Education in the 21th Century*, 57, pp. 90-101.
43. Bussotti, P., 2013, L'insegnamento della matematica nella scuola secondaria superiore dall'unificazione alla riforma Gentile (Italian. Translation: "The teaching of mathematics in high school since Italian unification to the *Riforma Gentile*"), in *Annali di storia dell'educazione*, n. 20., pp. 241-264.
44. Bussotti, P. (In collaboration with R. Pisano), 2014, On the *Jesuit Edition* of Newton's *Principia*. Science and Advanced Researches in the Western Civilization, in *Advances in Historical Studies*, Vol. 3, No.1, pp. 33-55. Published Online February in SciRes (<http://www.scirp.org/journal/ahs>).
45. Bussotti, P., 2014, The scientific revolution of the 17th century. The aspects connected to physics and astronomy: an educational itinerary in seven lessons, *Problems of Education in the 21st Century*, 58, pp. 5-12.
46. Bussotti, P., 2014, Infinity: an interdisciplinary access key to philosophical education

- through mathematics, *Problems of Education in the 21st Century*, 60, pp. 5-9.
47. Bussotti, P., 2014 (In collaboration with R. Pisano), Notes on mechanics and mathematics in Torricelli as physics-mathematics relationship in the history of science, in, *Problems of Education in the 21st Century*, 61, pp. 88-97.
 48. Bussotti, P., 2014 (In collaboration with R. Pisano), Newton's *Philosophiae Naturalis Principia Mathematica* "Jesuit" Edition: The Tenor of a Huge Work, in *Rendiconti Lincei: Matematica e Applicazioni*, 25, 4, pp. 413-444.
 49. Bussotti, P., 2014 (In collaboration with R. Pisano), Historical and Epistemological Reflections on the Culture of Machines around the Renaissance: How Science and Technique Work?, First part, in *Acta Baltica Historiae et Philosophiae Scientiarum*, Vol. 2, No. 2 (Autumn 2014), pp. 20-42. DOI: 10.11590/abhps.2014.2.02.
 50. Bussotti P., 2014 (In collaboration with R. Pisano), Galileo a Padova: un itinerario tra, architettura, fortificazioni, matematica e scienza "pratica" (Italian. Translation: "Galileo in Padua: an itinerary among architecture, fortifications, mathematics and 'practical' science"), in *Lettera Matematica Pristem*, 91, pp. 48-58.
 51. Bussotti P., 2015 (In collaboration with R. Pisano), Galileo in Padua: architecture, fortifications, mathematics and "practical" science. (Traslation into English of 50.), in *Lettera Matematica International*, 2, pp. 209-222. DOI 10.1007/s40329-014-0068-7.
 52. Bussotti, P., 2015 (In collaboration with R. Pisano), Pisano, R., & Bussotti, P. (2015). Introduction to Advances in Historical Studies Special Issue: Exploring Changes in How the Histories of the Exact Sciences Have Been Written: Interpreting the Dynamics of Change in These Sciences and Interrelations amongst Them—Past Problems, Future Cures?, *Advances in Historical Studies*, 4, 65-67. <http://dx.doi.org/10.4236/ahs.2015.42007>.
 53. Bussotti, P., 2015 (In collaboration with R. Pisano), The Geometrical Foundations of Federigo Enriques' Gnoseology and Epistemology, in *Advances in Historical Studies*, 4, pp. 118-145. <http://dx.doi.org/10.4236/ahs.2015.42012>.
 54. Bussotti, P., 2015 (In collaboration with R. Pisano), Historical and Epistemological Reflections on the Culture of Machines around the Renaissance: Machines, Machinaries and Perpetual Motion (second part of 49.), *Acta Baltica Historiae et Philosophiae Scientiarum*, 3, 1, (Spring 2015), pp. 69-87. DOI: 10.11590/abhps.2015.1.04.
 55. Bussotti, P., 2015, Differential calculus: the use of Newton's *Methodus Fluxionum et Serierum infinitarum* in an education context, in *Problems of Education in the 21th Century*, 69, pp. 39-65.

56. Bussotti, P., 2015, The teaching of History of Science at the University: some brief Considerations, in *Journal of Baltic Science Education*, 14, 5, pp. 564-568.
57. Bussotti, P. (In collaboration with Raffaele Pisano), 2015, Fibonacci and the Abacus Schools in Italy. Mathematical Conceptual Streams-Education in its Changing Relationship with Society, in *Almagest*, 6, 2, pp. 126-164.
58. Bussotti, P. 2015, Leonardo Pisano called Fibonacci, between advanced mathematics, history of mathematics and mathematics education: three examples drawn from *Liber Quadratorum*, in *Annales Universitatis Paedagogicae Cracoviensis. Studia ad Didacticam Mathematicae Pertinentia*, VII, pp. 5-25.
59. Bussotti, P. 2016, La concezione dell'infinito in Federigo Enriques (Italian. English translation: "Federigo Enriques' conception of infinity"), in *Matematica, Cultura e Società, Rivista dell'Unione Matematica Italiana*, Serie 1, Vol. 1, N. 1, pp. 65-86.
60. Bussotti, P. (In collaboration with Raffaele Pisano), 2016, A Newtonian tale details on notes and proofs in Geneva edition of Newton's Principia, in *BSHM Bulletin Journal of the British Society for the History of Mathematics* DOI: 10.1080/17498430.2016.1183182.
61. Bussotti, P. (In collaboration with Matteo Casarosa), 2016, Filosofia e didattica della matematica in Francesco Cecioni (Italian. English translation: "Philosophy and didactics of mathematics in Francesco Cecioni), in *Nuova Secondaria*, 3, novembre 2016, pp. 78-80.

5. Books chapters (including Conferences' Proceedings)

1. Bussotti, P., 2001, Nota sulla filosofia di Ignacio Matte Blanco, (Italian. Translation: "A note on the philosophy of Ignacio Matte Blanco"), in *Genitori e figli*, pp. 219-226, Edizioni Universitarie, Roma.
2. Bussotti, P. (In collaboration with M. Mengheri), 2001, Scienza e psicosomatica: adesione e distanza (Italian. Translation: "Science and psychosomatic: adherence and distance"), in *Studi e ricerche dell'istituto di psicologia generale e clinica e della scuola di specializzazione dell'Università degli studi di Siena, facoltà di Medicina e chirurgia: Scritti in onore di Virgilio Lazzeroni*, pp. 87-98, Siena, Cantagalli.
3. Bussotti, P., 2003, Qualche osservazione su Darapti e sul problema dell'esistenza, (Italian. Translation: "Some observations on Darapti and on the problem of existence"),

- in Enriques F, Ghione F, Moretti M., *Insegnamento dinamico*, pp. 169-172, La Spezia, Agorà edizioni.
4. Bussotti, P., 2004, *Matematica e filosofia. Il caso della geometria proiettiva*, (Italian. Translation: “Mathematics and philosophy. The example of the projective geometry”), in *Enriques e Severi. Matematici a Confronto nella cultura del Novecento*, pp. 181-212, La Spezia, Agorà.
 5. Bussotti, P. (In collaboration with G. Sachs), 2005, *Application of optimal control theory to dynamic soaring of seabirds*, in *Variational analysis and applications*, pp. 975-994, Springer Verlag.
 6. Bussotti, P., 2008, *Enriques e Hilbert: fondamenti della matematica e questioni conoscitive*, (Italian. Translation: “Enriques and Hilbert: foundations of mathematics and gnoseological problems”), in P. Bussotti (editor) *Federigo Enriques e la cultura europea*, pp. 69-100, Agorà publishing, Lugano.
 7. Bussotti, P., 2008, *Fibonacci und sein Liber Quadratorum*, (German. Translation: “Fibonacci and his Liber Quadratorum”), in *Kaiser Friedrich II. 1194-1250. Welt und Kultur des Mittelmeerraums*, Philip von Zabern, Mainz, pp. 234-249.
 8. Bussotti, P., 2009, *Le note scientifiche, matematiche e geografiche delle edizioni lucchese e livornese dell'Encyclopédie* (Italian. Translation: “The scientific, mathematical and geographical notes of Lucchese and Livornese editions of the Encyclopédie”), in *Livorno 1606/1806. Luogo di incontri tra popoli e culture*, edited di A. Prospero, pp. 225-242, Torino, Allemandi.
 9. Bussotti, P., 2010, *Leonardo Pisano, gennant Fibonacci, Liber Abaci*, (German. Translation: “Leonardo Pisano, called Fibonacci, Liber Abaci”), in *Die Staufer und Italien. Drei Innovationregionen in mittelalterlichen Europa. Band 2: Objecte*, edited by A. Wiczorek, B. Scheidmueller, S. Weinfurter, pp. 290-291, CES und WBG, Darmstadt.
 10. Bussotti, P., 2010, *Leonardo Pisano, gennant Fibonacci, Flos super solutionibus quarundam questionem ad numerum et geometriam vel ad utrumque pertinentium*, (German. Translation: “Leonardo Pisano, called Fibonacci, Flos super solutionibus quarundam questionem ad numerum et geometriam vel ad utrumque pertinentium”), in *Die Staufer und Italien. Drei Innovationregionen in mittelalterlichen Europa. Band 2. Objecte*, edited by A. Wiczorek, B. Scheidmueller, S. Weinfurter, p. 291, CES und

WBG, Darmstadt.

11. Bussotti, P., 2011, The circulation of Kepler's cosmological ideas in Italy during Kepler's lifetime, in *Kepler. La Physique celeste. Autour de l'Astronomia Nova* (Edited by E. Mehl), pp. 209-229, Les Belles Lettres, Paris.
12. Bussotti, P., 2012, L'edizione lucchese e l'edizione livornese della Encyclopédie: le note scientifiche, matematiche e geografiche (Italian. Translation: "The lucchese edition and the livornese edition of the Encyclopédie: the scientific, mathematical and geographical notes"), in *Editori, Tipografi e Lumi. La stampa a Livorno dal 1644 al 1830*, pp. 81-116, Comune di Livorno, Livorno.
13. Bussotti P. (In collaboration with R. Pisano), 2013, Notes on the Concept of Force in Kepler. In: Pisano, Capecchi, and Lukešová (eds), *Physics, Astronomy and Engineering. Critical Problems in the History of Science. International 32nd Congress for The SISFA–Italian Society of Historians of Physics and Astronomy*, pp. 337-344, The Scientia Socialis UAB & Scientific Methodical Centre Scientia Educologica Press, Šiauliai University, Lithuania.
14. Bussotti P., 2014, The possible relations between history of mathematics and mathematics education, in *Science and Technology Education for the 21st Century. Research and Research Oriented Studies. Proceedings of the 9th IOSTE Symposium for Central and Eastern Europe*, Hradek Králové, Gaudeamus, pp. 29-41.
15. Bussotti P., 2015 Preface to the book N. Borgia, *Le Quattro operazioni dell'aritmetica pratica*, Pisa, ETS. (Italian. Translation: *The four operations of practical arithmetic*).
16. Bussotti, P., 2015 (In collaboration with R. Pisano), The Emergencies of Mechanics and Thermodynamics in the Western Techno-Science Society during Eighteenth-Nineteenth Century, in R. Pisano (ed.), *A Bridge between Conceptual Frameworks*, History of Mechanism and Machine Science 27, Springer Science+Business Media, Dordrecht, pp. 399-436. DOI 10.1007/978-94-017-9645-3_21.
17. Bussotti, P., 2016, Quantità, gradazione e intensità nelle opere fisiche di Descartes (Italian. Translation: Quantity, gradation and intensity in Descartes' physical works), in T. Kisser and T. Leinkauf (editors), *Intensität und Realität*, Berlin, De Gruyter, pp. 103-127.
18. Bussotti, P., 2016 (In collaboration with R. Pisano), "Newton Geneva" Edition as research programme concerning the relationship physics-mathematics in the history and philosophy of science, in P. Tucci (editor), *Società italiana degli Storici della Fisica e*

dell'Astronomia, Atti del XXXIV Convegno annuale, Proceedings of the 34th Annual Conference, Pavia, Pavia University Press, pp. 149-155.

6. Other scholarly works

1. Interview to Professor Ciro Ciliberto on the subject “Le origini della scuola italiana di geometria proiettiva” (Italian. Translation “The origin of Italian school of projective geometry”), in P. Bussotti (Editor) *Federigo Enriques e la cultura europea*, Agorà, Lugano, 2008, pp. 9-25.
2. Historical-mathematical appendix to the work by Professor Brunello Lotti entitled “La teoria della sostanza individuale nel *Discorso di Metafisica* di Leibniz”, 2016 (Italian. Translation: “The theory of individual substance in Leibniz’s *Discours de Métaphysique*”). This paper has been realized for the SFI (Italian Philosophical Society). Freely pdf-version available at www.sfivg.eu/wp-content/uploads/2016/03/Leibniz-LOTTI.pdf.

7. Reviews

1. Bussotti P, 2008, review to Polizzi, G. (Editor), 2009, *Einstein e i filosofi*, in *Scienza in rete. Gruppo 2003 per la ricerca*, 2009, web page <http://www.scienzainrete.it/>.
2. Bussotti, P, 2016, review to Leibniz, Gottfried Wilhelm, *Collected Works and Letters. Series 3. Mathematical, scientific and technique correspondence*. Vol 8: 1699-1701, Berlin, De Gruyter/Akademie Forschung, 2015, in *Zentralblatt für Mathematik*, zbl 1338.01075.
3. Bussotti, P, 2016, review to Parlangeli, Andrea, *A pure spirit. Ennio De Giorgi, genius of mathematics. (Uno spirito puro. Ennio De Giorgi, genio della matematica*. Lecce: Milella (ISBN 978-88-7048-584-4/pbk). 278 pp, 2015. Italian) in *Zentralblatt für Mathematik* Zbl 1343.01003..
4. Bussotti, P, 2016, review to Ferraro, Giovanni (Editor) *Aspects of the Neapolitan mathematics in the nineteenth and twentieth centuries (Aspetti della matematica napoletana tra Ottocento e Novecento*, Aracne, Rome, ISBN 978-88-548-6072-8, 300 pp., 2013. Italian). Published in the site of the American Mathematical Society MathSciNet 14 April 2016.

8. Published Abstracts

1. Bussotti, P., 2003, An approach to the indefinite descent, in *Jahrestagung 2003, 14.-19. September in Rostock. Vortragsauszüge*, p. 90, Deutsche Mathematiker-Vereinigung.
2. Bussotti, P., 2004, Indefinite descent and methods of reduction, 2004, in *Jahrestagung 2004, 12. Bis 17. September an der Universität Heidelberg. Abstracts*, p. 148, Deutsche Mathematiker-Vereinigung.
3. Bussotti P. (In collaboration with R. Pisano), 2014, Mechanics, science and society in the Renaissance: what tradition? In *Conference abstract proceedings. 2nd International Scientific Conference on Philosophy of Mind and cognitive Modelling in Education*, May 26-28, Maribor, Slovenia, pp. 9-12.
4. Bussotti, P., 2016, Kepler's influence on Leibniz's planetary theory, in abstracts of the talks for the Conference *Theatrum nature et atrium, Leibniz und die Schauplätze der Aufklärung*, pp. 52-54.

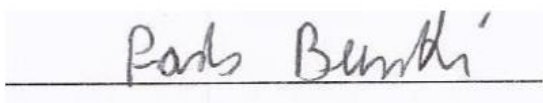
9. Posters

1. Bussotti, P. (In collaboration with R. Pisano), 2014. International Conference on the History of Physics. *Re-Thinking Newton's Principia as Exposed within Newtonian Jesuit Edition*. 4-5 September 2014, Trinity College Cambridge, UK.

Updated, 23 November 2016

Signature

Paolo Bussotti

A handwritten signature in cursive script, reading "Paolo Bussotti", is written over a horizontal line.