

# Niccolò Guicciardini Corsi Salviati

Università degli Studi di Bergamo  
Dipartimento di Lettere e Filosofia  
via Pignolo, 123  
Bergamo BG 24121 Italy

Phone: +39 035 2052438

Fax: + 39 035 2052430

email: [niccolo.guicciardini@unibg.it](mailto:niccolo.guicciardini@unibg.it)

URL: <http://cav.unibg.it/guicciardini/>

## Curriculum vitae

Born: May 28, 1957—Firenze, Italy

Nationality: Italian

### Current position

*Associate Professor*, Università degli Studi di Bergamo

### Areas of specialization

History and Philosophy of the Exact Sciences in the Seventeenth and Eighteenth Centuries. Isaac Newton.

### Areas of competence

History and Philosophy of Mathematics and Logic, History and Philosophy of Physics.

### Employment history

2007-present *Associate Professor*, Università degli Studi di Bergamo

2001-2006 *Associate Professor*, Università degli Studi di Siena

1992-2001 *Lecturer (Ricercatore)*, Università degli Studi di Bologna

### Visiting positions

- 2013, Jan-Jun *Gastwissenschaftler* at the Bernoulli-Euler-Zentrum (Basel)  
2011 March *Professeur invité*, Université Paris 7 Denis Diderot  
2006 *Mellon Visiting Professor*, California Institute of Technology  
2004-5 *Visiting Fellow*, Clare Hall (Cambridge, UK)  
2003-present *Visiting Professor* (Professore a contratto), Università Vita-Salute San Raffaele (Milano)  
1995 July *Tutor*, Mathematics Department, University of Utrecht  
1985-7 *Research Assistant*, Middlesex Polytechnic (UK)

### Education

- 1992 LAUREA=MSc in Physics, Università degli Studi di Milano  
1987 PHD in History of Mathematics, Middlesex Polytechnic (UK)  
1982 LAUREA=MA in Philosophy, Università degli Studi di Milano

### Awards & Distinctions

- 2012 *Selezione Giuria Scientifica del Premio Letterario Galileo per la Divulgazione Scientifica - anno 2012*, Comune di Padova (€5,000)  
2011 *Fernando Gil International Prize for the Philosophy of Science*, Portuguese Foundation for Science and Technology & Calouste Gulbenkian Foundation (€125,000)  
2011-12 *Sarton Medal*, University of Ghent, Belgium  
2006 *Section Lecturer*, International Congress of Mathematicians (Madrid)  
2005-present *Life Member*, Clare Hall (Cambridge)

### Professional activities

- 2010-present Co-Editor in Chief, *Historia Mathematica*  
2011-2013 Nominations and elections committee, *International Society for the History of Philosophy of Science*  
2007-2012 Member of the *Wissenschaftlicher Beirat* of the Bernoulli-Edition (Basel)

- 2006-present Corresponding (2006-2012) and in 2013 elected effective member, *Académie Internationale d'Histoire des Sciences*
- 2010 Organizer (with Richard T. W. Arthur) of the international workshop "On the Contested Expanding Rôle of Applied Mathematics from the Renaissance to the Enlightenment", Centro De Giorgi, Scuola Normale Superiore, Pisa
- 2005 Organizer (with Tinne Hoff Kjeldsen and David E. Rowe) of the meeting "Mathematics in the Physical Sciences, 1650-2000" at the *Mathematisches Forschungsinstitut*, Oberwolfach (Germany)
- 2004-present Member of the Executive Committee of the *International Commission on the History of Mathematics*
- 2004-present Editorial Board, *Archive History of Exact Sciences*, *Historia Mathematica*, *Hopos*, *Early Science and Medicine*, *Nuncius*
- 1992-present *Book reviewer* for Cambridge University Press, Princeton University Press, Oxford University Press, Routledge, Springer, Edinburgh University Press, and other publishers

## Teaching

1992-present Courses taught at the Universities of Bologna, Siena, Bergamo, and San Raffaele (Milan)

1. Cosmology and astronomy from Copernicus to Galilei.
2. History of the exact sciences from Galilei to Newton.
3. Conceptions of mathematics and mathematical practice from Galilei to Kant.
4. The sciences and philosophy during the Enlightenment.
5. A history of electromagnetism.
6. An introduction to the concepts of quantum mechanics.
7. A history of the conceptions of time and space from Newton to Einstein.
8. An introduction to propositional and predicate logic.
9. History of mathematical thought.
10. Philosophical issues in the historiography of science.

Courses taught as Visiting Professor at *Caltech* and at the *Université Paris 7 Denis Diderot*.

1. Geometry, mechanics and natural philosophy in 17th and 18th centuries.
2. Isaac Newton and the scientific revolution.

2009-present Member of the collegio docenti of the “Scuola di Dottorato in Filosofia” of the University of Turin.

## Talks

- 2013.7.22 “Calandrini, Le Seur, and Jacquier: editing Newton’s *Principia* in Geneva and Rome”, 24th International Congress of History of Science, Technology and Medicine, Manchester
- 2013.4.17 “Isaac Newton and the Neo-Pythagorean Tradition”, Institut für Philosophie, Universität Bern, Switzerland
- 2012.II.19 “Open issues in the new historiography of European early modern mathematics”, International Seminar on the History of Mathematics, Ramjas College, University of Delhi
- 2012.6.15 “Comment on Edith Sylla, ‘Jacob Bernoulli and Conjecturing Outcomes in Tennis’”, First Neale W. Watson Seminar, Museo di Storia della Scienza, Firenze
- 2012.6.14 “The history of mathematics as intellectual history”, Institut für Philosophie, Institut Wiener Kreis, Universität Wien
- 2012.5.18 “The history of mathematics as intellectual history”, International Conference on the History of Modern Mathematics, Northwest University, Xi’an (China)
- 2012.4.17 “Incontro con l’autore Premio Letterario Galileo per la Divulgazione Scientifica”, Planetario di Padova
- 2012.4.3 “*Veteres et Recentes: tradition et innovation dans l’œuvre mathématique de Newton*”, Salle du Conseil, Observatoire de Paris
- 2012.3.20 “ ‘Specious algebra is fit enough to find out, but entirely unfit to consign to writing and commit to posterity’ ”: Newton’s publication strategies as a mathematical author”, Centro de Filosofia das Ciências, University of Lisbon

- 2012.3.19 “The Philosophy of mathematics and mathematical practice: the case of Isaac Newton’s conceptions of mathematical certainty and method”, Fernando Gil Prize Lecture, Calouste Gulbenkian Foundation, Lisbon
- 2012.3.15 “ ‘Specious algebra is fit enough to find out, but entirely unfit to consign to writing and commit to posterity’ ”: Newton’s publication strategies as a mathematical author”, Sarton Medal Lecture, University of Ghent
- 2012.2.17 “Newton e la tradizione neopitagorica”, *Mathesis*, Liceo Mascheroni, Bergamo
- 2012.1.5 “Newton and the Neo-Pythagorean Tradition”, *AMS-MAA Joint Meetings*, Boston
- 2011.12.15 “D. T. Whiteside’s edition of Isaac Newton’s mathematical papers”, *Editing Historical Mathematics: Techniques and Traditions since 1900, Research Symposium*, All Souls College, Oxford
- 2011.11.9 “On the Annotated Edition of Newton’s *Principia* (1739-42) by Le Seur, Jacquier and Calandrini”, *Søminemøde i Netværk for Matematikkens Historie og Filosofi*, Søminestationen, Denmark
- 2011.11.8 “Newton and the Neo-Pythagorean Tradition”, *Danish Society for the History of Science*, Department of Mathematical Sciences, University of Copenhagen
- 2011.10.14 “L’edizione di Le Seur, Jacquier e Calandrini dei *Principia* di Newton”, *Colloque international François Jacquier, un religieux dans la République des Lettres et des Sciences au siècle des Lumières organisé avec le parrainage de l’Académie des Sciences et la Société mathématique de France*, Vitry-le-François

- 2011.3.14 “The mathematical correspondence between John Wallis and Isaac Newton: contrasting methods and publication practices”, *Séminaire Équipe REHSEIS du laboratoire SPHERE*, Paris 7 Diderot
- 2011.1.7 “The Quarrel on the Invention of the Calculus in Jean É Montucla and Joseph Jérôme de Lalande, *Histoire des Mathématiques (1758/1799-1802)*”, *Annual American Mathematical Society- Mathematical Association of America Meetings*, New Orleans, LA
- 2010.12.16 “The Quarrel on the Invention of the Calculus in Jean É Montucla and Joseph Jérôme de Lalande, *Histoire des Mathématiques (1758/1799-1802)*”, *The History of the History of Mathematics, Research Symposium*, All Souls College, Oxford
- 2010.9.15 “Qualifying the Received View on the Birth of Analytical Mechanics: The Case of Johann Bernoulli’s Study of Motion in Resisting Media”, Workshop presso il *Centro di Ricerca Matematica Ennio De Giorgi, Collegio Puteano, Scuola Normale Superiore*, Pisa
- 2010.4.28 “Newton e Rameau”, Foyer “Rossini”, *Teatro Comunale di Bologna*, Ciclo di conferenze organizzato dalla *Fondazione Teatro Comunale di Bologna*
- 2010.4.22 Lezione alla *Scuola Superiore di Studi Umanistici* nell’ambito del dottorato “Storia delle idee. Filosofia e scienza”, *Università di Bologna*
- 2010.4.13 “John Wallis as Correspondent and Editor of Newton’s Mathematical Work”, Symposium on *John Wallis as Correspondent and Controversialist*, *Jesus College*, Oxford
- 2010.3.24 “Newton e Leibniz, due matematici in guerra”, Conferenza organizzata dal *Museo della Matematica, Il Giardino di Archimede*, Firenze

- 2010.1.14 “Certezza matematica e filosofia sperimentale nel dibattito fra Robert Hooke e Isaac Newton”, Associazione Subalpina Mathesis presso il *Dipartimento di Matematica dell’Università di Torino*
- 2009.12.3 “The History of Mathematics and Intellectual History”, *Institut für Mathematik, Gutenberg Universität, Mainz*
- 2009.10.22 “Isaac Newton e la matematica come fonte di certezza nella filosofia della natura”, *Dipartimento di Matematica, Università degli Studi di Milano*
- 2009.5.21 “Conceptualism and contextualism in the history of mathematics”, Workshop “The Relations between History and Philosophy of Science”, *Università degli Studi di Bergamo*
- 2009.4.21 “Isaac Newton’s views on mathematical certainty and method ”, *Department of Mathematics, Copenhagen University*
- 2009.4.20 “Isaac Newton’s views on mathematical certainty and method ”, *Institut for Videnskabsstudier, Aarhus University*
- 2009.4.6 “La filosofia della matematica di Newton”, *Dipartimento di Filosofia, Università degli Studi di Torino*
- 2009.3.20 “Le critiche di Newton alla geometria di Cartesio”, Seminario “Il ruolo dell’intuizione nella dimostrazione matematica”, *Scuola Normale Superiore, Pisa*
- 2009.2.3 “Le critiche di Leibniz e di Johann Bernoulli ai *Principia* di Newton”, Seminario “Il ruolo dell’intuizione nella dimostrazione matematica”, *Scuola Normale Superiore, Pisa*
- 2009.1.30 “Philosophical agendas and mathematical practices in Isaac Newton’s natural philosophy”, Symposium “Astronomy and Science be-



fore and after Galileo”, *Institute for Advanced and Basic Sciences*, Zanjan (Iran)

- 2008.12.17 “Isaac Newton and Johann Bernoulli on the mathematization of central force motion”, Workshop “Unreasonable Effectiveness? Historical Origins and Philosophical Problems for Applied Mathematics”, *All Souls College*, Oxford
- 2008.7.8 Invited lecture al workshop ”Mechanics, mathematical physics and foundations of mathematics in the 18th and 19th Centuries”, *Centro De Giorgi (Scuola Normale Superiore)*, Pisa
- 2008.3.27 “Newton’s quest for mathematical certainty in natural philosophy”, *Radboud University*, Nijmegen.
- 2008.1.7 “On the early history of  $F = ma$ ”, *Annual AMS-MAA Meetings*, San Diego, California
- 2007.9.26 Invited lecture at the *Annual Meeting of the Austrian Physical Society*, Krems (Austria)
- 2007.6.18 “Reconsidering the *Commercium epistolicum*”, Conference *Newton: in Pursuit of the Secrets of God and Nature*, *The Van Leer Institute*, Jerusalem
- 2007.5.22 “Newton’s views on mathematical evidence and method”, Mellon Conference, *California Institute of Technology*, Pasadena (USA)
- 2007.3.7 “La cultura in Italia: una, due, nessuna?”, Workshop presso il *Centro di Ricerca Matematica Ennio De Giorgi, Scuola Normale Superiore*, Pisa
- 2007.3.6 “Isaac Newton”, lezione presso il *Museo della Matematica, Il Giardino di Archimede*, Firenze

- 2007.2.23 “New Perspectives on a Newtonian Philosophy of Mathematics”, invited speaker. *1st Annual Colloquium of the Iranian Institute of Philosophy*, Teheran, IRAN
- 2006.12. 8 “Newton on certainty and mathematical method”, *California Institute of Technology*, Pasadena (USA)
- 2006.12.1 “‘Not worthy of public utterance’: Newton on the use of analysis and synthesis in natural philosophy”, History of Science and Technology Fall Colloquium 2006, *University of Minnesota*, Minneapolis (USA)
- 2006.8.26 “Method versus calculus in Newton’s criticisms of Descartes and Leibniz”, Invited Section Lecture, *International Congress of Mathematicians*, Madrid
- 2006.6.16 “Newton’s views on certainty and mathematical method”, *HOPOS 2006: 6th International History of Philosophy of Science Congress*, Paris
- 2006.5.18 “Metodo degli antichi e analisi dei moderni nella disputa Newton-Leibniz”, Seminari di Storia della filosofia moderna, *Università degli Studi di Milano*
- 2006.2.20 “The reception of the method of fluxions in France and Italy”, *Mathematisches Forschungsinstitut*, Oberwolfach (Germany)
- 2005.11.26 “The relationships between geometry and mechanics at the mid of the seventeenth century: an overview ”, *Centro di Ricerca Matematica Ennio De Giorgi della Scuola Normale Superiore*, Pisa
- 2004.11.27 “Mechanica rationalis and philosophia naturalis in the Auctoris Praefatio to Newton’s *Principia*”, *International workshop organized in the framework of the ESF Programme “From Natural Philosophy to Science”*,

## Firenze

- 2004.11.23 “The role of mathematics in Newton’s natural philosophy”, *Newton Institute*, Cambridge, UK
- 2004.9.24 “The Auctoris Praefatio to Newton’s *Principia*: geometry and mechanics in the Newtonian mathematical school”, *Gruppo di ricerca nazionale sull’ illuminismo britannico*, IULM, Milano
- 2004.6.17 Intervento a commento della relazione di Paolo Casini su “Teorie e Pratiche scientifiche”, Convegno organizzato dalla *Società italiana di Studi sul Secolo XVIII*, *Università degli Studi di Catania*, *Istituto Italiano per gli Studi Filosofici*, Siracusa
- 2003.2.21 “Newton segreto e Newton pubblico”, seminario organizzato da *Alétheia*, Teatro Comunale di Porto S. Giorgio (AP)
- 2003.1.7 “Intersections between history of mathematics and history of philosophy: the case of Isaac Newton”, *Mathematisches Forschungsinstitut*, Oberwolfach (Germania)
- 2002.11.16 “Maurizio Mamiani e gli studi newtoniani”, *Assemblea Annuale della Società Italiana di Storia della Scienza*, Villa Grismondi - Finardi, Bergamo
- 2002.9.20 “Le *Notae in Newtoni Principia Mathematica Philosophiae Naturalis* di David Gregory”, seminario “Filosofia, Scienza e Politica nel Settecento Britannico”, *Gruppo di ricerca nazionale sull’illuminismo britannico*, IULM, Milano
- 2001.9.19 “Le dimostrazioni e il loro contesto: come leggere oggi i *Principia* di Newton?”, *IV Scuola Estiva di Filosofia della Fisica*, organizzata da *Centro Interuniversitario di ricerca in Filosofia e Fondamenti della Fisica e Società Italiana di Logica e Filosofia delle Scienze*

- 2001.5.4 “La matematizzazione della filosofia naturale in Newton: mito e realtà”, *SAIt 2001- XLV Congresso Nazionale della Società di Astronomia Italiana*
- 2000.11.24 “Did Leibniz accept Newton’s limit theory in 1700ca.?” in “Corporeal Substances and the Labyrinth of the Continuum in Leibniz”, *Florence Center for the History and Philosophy of Science*, Firenze
- 2000.4.12 “Newton’s philosophy of mathematics”, *Department of Philosophy, University of Aberdeen*
- 2000.3.31 “Matematica e alchimia in Newton”, Ciclo di conferenze organizzato da *Nuova Civiltà delle Macchine*, Forlì
- 2000.3.22 “I metodi matematici usati da Newton nei *Principia*”, *Scuola Superiore di Studi in Fondamenti e Filosofia della Fisica*, Cesena
- 1999.9. 22 “Proofs without context: a modern debate concerning Newton’s *Principia*”, Colloque “Renouvellement et extension des méthodes en histoire des mathématiques”, *CIRM*, Luminy, Marseille
- 1999.6.28 “Reading the *Principia*: The debate on the mathematical principles for natural philosophy,” *Center for the History of Physics (UCLA)*, *CISSC (Pisa)*, *Domus Galileiana*, Arcidosso (GR)
- 1999.4.28 “Il libro della Natura e il libro della Scrittura: leggere la scienza ieri e oggi,” in “Lecture e dintorni: secondo convegno provinciale per la promozione della lettura nelle scuole di ogni ordine e grado”, *Provveditorato agli Studi di Brescia*, Auditorium del Museo Civico di Scienze Naturali, Brescia
- 1999.3.24 “La filosofia naturale di Newton,” “Corso di perfezionamento in antropologia filosofica e fondamenti delle scienze”, *Università degli*

*Studi di Urbino*, Centro della Pesa, Riccione

- 1999.2.2 “I metodi matematici usati da Newton nei Principia,” *Scuola Superiore di Studi in Fondamenti e Filosofia della Fisica*, Cesena
- 1998.5.29 “The debate on Newton’s mathematical methods for natural philosophy”, Workshop “QED: Demonstration in historical and cross-cultural context”, *Max-Planck Institut für Wissenschaftsgeschichte*, Berlin
- 1998.5.15 “I metodi matematici dei *Principia* di Newton,” *XVIII Congresso della Commissione per la Storia della Fisica e dell’Astronomia*, Como
- 1997.9.23 “Newton’s restructurings of the Principia 1687-1720”, “Colloque international d’Histoire des Mathématiques, Contructions, Reconstructions et Images du Corpus Mathématique dans l’Histoire”, *CIRM*, Luminy, Marseille
- 1997.5.29 “Newton ha utilizzato il calcolo nei *Principia*?”, Convegno “Storia e Filosofia della Scienza: lo Stato delle Ricerche Italiane di Punta”, *Università di Padova*
- 1997.5.26 “The debate on the mathematical principles for natural philosophy from 1687 to 1720”, *Forschungsinstitut für Technik- und Wissenschaftsgeschichte des Deutschen Museums*, Monaco
- 1997.5.15 “The unification of long and short range forces in Newton and some of his followers”, *First Seven Pines Symposium on Historical Perspectives and Philosophical Problems in the Unification of Physics*, Lewis, Wisconsin, USA)
- 1997.3.26 “The debate on Newton’s mathematical methods at the beginning of the eighteenth century”, *Institut Poincaré* (Parigi)
- 1997.1.29 “Le interpretazioni dei *Principia* di Newton fra Sei e Settecento”,

Conferenza presso il *Centro Interdipartimentale di Ricerche in Storia e Filosofia delle Scienze* (Padova)

- 1996.12.3 “Between tradition and innovation: Newton’s restructurings of the *Principia*”, *Centro Viète dell’Università di Nantes*
- 1996.3.19 “Matematici in guerra”, Seminario “Forme di esperienza, modalità di prova”, *Dipartimento di Filosofia, Università di Bologna*
- 1995.11.15 “Newton’s method and Leibniz’s calculus”, Seminario “Geschichte der Analysis ”, *Università di Bielefeld*
- 1995.10.19 “*Prisca geometria*: geometrical methods in dynamics in the Newtonian school”, Convegno “Histoire de la Lecture des Anciens en Mathématiques”, *CIRM, Luminy-Marsiglia*
- 1995.5.29 “Alcuni aspetti della dinamica e della geometria newtoniane”, *Dipartimento G. Castenuovo di Matematica, Università di Roma*
- 1994.11.8 “The reception of Newton’s dynamics in the Continental and the British schools”, Séminaire d’Histoire des Mathématiques, équipe *REHSEIS* (Paris)
- 1994.4.22 “The reception of Newton’s geometrical dynamics in early eighteenth century”, *Mathematisches Forschungsinstitut, Oberwolfach* (Germany)
- 1993.11.4 “I newtoniani e la stabilità delle stelle”, Covegno “Copernico e la Questione Copernicana”, *Università di Ferrara*
- 1993.4.21 “I rapporti fra calcolo e dinamica in Newton”, Seminario “Incontri di Storia della Matematica delle Università Toscane”, *Dipartimento di Matematica, Università di Siena*

- 1993.3.12 “La rappresentazione geometrica nell’opera matematica di Newton”, Seminario “Le immagini e la scienza”, *Dipartimento di Filosofia, Università di Bologna*
- 1991.9.18 “Il calcolo infinitesimale nel Settecento”, Convegno “Storia e Didattica della Fisica”, Pavia
- 1990.10.5 “Realizzazione di un ipertesto”, LXXVI Congresso Nazionale della *Società Italiana di Fisica*, Trento
- 1989-9.20 “Newton and British Newtonians on the foundations of the calculus”, “Hegel and Newtonianism”, Trinity College (Cambridge)
- 1987.9.12 “Maclaurin’s study of ellipsoids”, *British Society for the History of Mathematics*, Gonville and Caius College (Cambridge)
- 1987.1.20 “Mathematicians at the British Military Schools in the 18th Century”, *British Society for the History of Science*, King’s College (London)
- 1986.9.10 “Colin Maclaurin: geometry vs calculus”, *British Society for the History of Mathematics*, Pembroke College (Oxford)
- 1985.4.15 “Flowing ducks and vanishing quantities”, Convegno “Scienza e Immaginazione nella Cultura Inglese del Settecento”, *Dipartimento di Anglistica e Dipartimento di Filosofia dell’ Università degli Studi di Milano*, Gargnano del Garda
- 1982.12.5 “Cambridge mathematics and algebra of logic”, *Convegno Internazionale di Storia della Logica* (San Gimignano), SILFS

Niccolò Guicciardini Corsi Salviati

## Publications

### MONOGRAPHS

- 2009 *Isaac Newton on Mathematical Certainty and Method*, MIT Press  
(*Gil Prize* presented by Portuguese Foundation for Science and Technology & Calouste Gulbenkian Foundation, €125,000)
- 1999 *Reading the Principia: the Debate on Newton's Mathematical Methods for Natural Philosophy from 1687 to 1736*, Cambridge University Press
- 1989 *The Development of Newtonian Calculus in Britain, 1700-1800*, Cambridge University Press

### TEXTBOOKS

- 2011 *Newton*, Carocci  
(*Selezione Giuria Scientifica Premio Galileo per la Divulgazione Scientifica - anno 2012*, presented by Comune di Padova, €5,000)
- 2007 *Fisica Quantistica: una Introduzione*, Carocci  
(with Gianluca Introzzi)
- 1998 *Newton: un Filosofo della Natura e il Sistema del Mondo*, Le Scienze  
(translations in German, Dutch, French, Portuguese, Spanish)



EDITED VOLUMES

- 2010 “Philosophical History of Science”, *The Monist* 93:4
- 2005 Co-editor (with Ivor Grattan-Guinness (editor), Roger Cooke, Leo Corry, Pierre Crépel (co-editors)), *Landmark Writings in Western Mathematics, 1640-1940*, Elsevier
- 2005 “Open Forum: Newton vs. Hooke on Gravitation,” *Early Science and Medicine* 10

JOURNAL ARTICLES & CHAPTERS IN COLLECTIVE VOLUMES

- 2013 “The Role of Musical Analogies in Newton’s Optical and Cosmological Work”, *Journal of the History of Ideas*, 74(1), pp. 45–67
- 2012 “Open issues in the new historiography of European early modern mathematics”, in *Ganita Bhāratī, Bulletin of the Indian Society for History of Mathematics* 34 (No.1-2), pp. 25-34
- 2012 “Newton’s Dispute with Leibniz”, in *The Isaac Newton’s Guide Book*, ed. by Denis R. Alexander, Faraday Institute Publishing, Cambridge, pp. 63–73 [to be distributed together with a DVD of the play *Let Newton Be!* by Craig Baxter]
- 2012 “‘Specious algebra is fit enough to find out, but entirely unfit to consign to writing and commit to posterity’: Newton’s publication strategies as a mathematical author”, *Sartoniana* 25, pp. 161–78 (Sarton Medal Lecture)
- 2012 “L’eredità newtoniana: una programma di ricerca aperto - Newton’s legacy: an open field of research”, in *Laura Bassi: emblema e primato*

*nella scienza del Settecento*, a cura di Luisa Cifarelli e Raffaella Simili, Società Italiana di Fisica, Bologna: Casa Editrice Compositori, pp. 49–58, 167–176

- 2012 “Newton o la Morte di un Eretico”, *Rivista di Storia della Filosofia*, 67(1), pp.131–40
- 2012 “John Wallis as Editor of Newton’s Mathematical Work”, *Notes and Records of the Royal Society* 66(1), pp. 3–17
- 2012 “The Quarrel on the Invention of the Calculus in Jean E Montucla and Joseph Jérôme de Lalande, *Histoire des Mathématiques (1758/1799–1802)*”, in *The History of the History of Mathematics*, B. Wardhaugh (ed.), Peter Lang, pp. 73–88
- 2010 “Certeza matematica e filosofia sperimentale nel dibattito fra Robert Hooke e Isaac Newton”, in *Conferenze e Seminari 2009-2010*, Associazione Subalpina Mathesis, Torino, Kim Williams Books, pp. 103–114
- 2009 “In Memoriam: Derek Thomas Whiteside (1932–2008)”, *Historia Mathematica* 36, pp. 4–9
- 2009 “Método versus Cálculo en las críticas de Newton a Descartes y Leibniz”, *Estudios de Filosofía* 39, pp. 9–38
- 2009 “Gigantic implements of war: the images of Newton as a mathematician”, in *Oxford Handbook of the History of Mathematics*, Eleanor Robson and Jacqueline Stedall (eds.), Oxford University Press, pp. 707–35
- 2008 “Isaac Newton”, in *Princeton Companion to Mathematics*, Tim Gowers and June Barrow-Green (eds.), Princeton University Press, pp. 742–3

- 2008 “Mechanik 1. mathematische”, *Enzyklopädie der Neuzeit*, Metzler Verlag, Bd.8, pp.
- 2008 “Kopernikanische Wende”, *Enzyklopädie der Neuzeit*, Metzler Verlag, Bd.7, pp. 26-30
- 2007 “Himmelsmechanik”, *Enzyklopädie der Neuzeit*, Metzler Verlag, Bd.5, pp. 453-456
- 2007 “*Mechanica rationalis* and *philosophia naturalis* in the *Auctoris Praefatio* to Newton’s *Principia*”, in M. Bucciantini, M. Camerota, S. Roux (eds.) *Mechanics and cosmology in the medieval and early modern period*, Olschki, pp. 169-86
- 2007 “La época del punto: el legado matemático de Newton en el siglo XVIII”, *Estudios de Filosofía* 35, pp. 67-109
- 2006 “Elastizität”, *Enzyklopädie der Neuzeit*, Metzler Verlag, Bd.3, pp. 173-76
- 2006 “Method versus Calculus in Newton’s criticisms of Descartes and Leibniz”, in *Proceedings of the International Congress of Mathematicians, Madrid, August 22-30 2006*, European Mathematical Society, Zürich, vol. 3, pp. 1719-42 [invited section lecture]
- 2005 “Astronomie”, *Enzyklopädie der Neuzeit*, Metzler Verlag, Bd.1, pp. 729-44
- 2005 “Geometry and Mechanics in the *Auctoris Praefatio* to Newton’s *Principia*”, in *Instruction and Amusement: le Ragioni dell’Illuminismo Britannico*, a cura di E. Mazza ed E. Ronchetti, Padova, Il Poligrafo, pp. 115-25

- 2005 “Reconsidering the Hooke-Newton Debate on Gravitation: Recent Results”, *Early Science and Medicine* 10, pp. 510-18
- 2005 “Calcolo”, in *Enciclopedia dei Ragazzi* (direzione Giuseppe Bedeschi), Roma, Istituto della Enciclopedia Italiana
- 2005 “Isaac Newton, *Philosophiae Naturalis Principia Mathematica*”, in *Landmark Writings in Western Mathematics, Case Studies 1640-1940*, Ivor Grattan-Guinness ed., Elsevier, pp. 59-87
- 2004 “Enrico Fermi: dalle Statistiche Quantistiche al Decadimento Beta”, in *Storia della Scienza*, Roma, Istituto dell’Enciclopedia Italiana, vol. 8, pp. 501-9
- 2004 “Geometry and Mechanics in the Preface to Newton’s *Principia*: a Criticism of Descartes’ *Géométrie*”, *Graduate Faculty Philosophy Journal* 25(2), pp. 119-59
- 2004 “Dot-Age: Newton’s Mathematical Legacy in the Eighteenth Century”, *Early Science and Medicine* 9(3), pp.218-56
- 2004 “Isaac Newton and the Publication of his Mathematical Manuscripts”, *Studies in History and Philosophy of Science* 35(3), pp. 455-70
- 2004 “Charles Hutton”, “Thomas Leybourn”, “Thomas Simpson”, “Edward Waring”, “James Gregory”, “Edmund Stone”, in *Oxford Dictionary of National Biography*, H. C. G. Matthew and Brian Harrison eds., Oxford University Press [also revisions of entries “William Emerson”, “Charles Hayes”, “Matthew Stewart”]
- 2003 “Conceptulism and Contextualism in the Recent Historiography of Newton’s *Principia*”, *Historia Mathematica* 30(4), pp. 407-31
- 2003 “Le *Notae in Newtoni Principia Mathematica Philosophiae Naturalis* di

- David Gregory”, in *Filosofia, Scienza e Politica nel Settecento Britannico*, a cura di L. Turco, Padova, Il Poligrafo, pp. 355-69
- 2002 “Il Dibattito sui Metodi Matematici per la Filosofia Naturale di Isaac Newton (1687-1736)”, in *Atti del Convegno Correnti Elettriche e Illuminismo Scientifico: Manifestazioni per il Bicentenario della Pila di Volta*, Centro A. Volta, Como (Italia), Franco Angeli, pp. 46-55
- 2002 “Maurizio Mamiani e gli Studi Newtoniani”, *Physis* 39, pp. 469-81
- 2002 “Isaac Newton”, in *Storia della Scienza*, Roma, Istituto dell’Enciclopedia Italiana, vol. 5, pp. 328-36
- 2002 “Gli sviluppi del Calcolo in Gran Bretagna”, in *Storia della Scienza*, Roma, Istituto dell’Enciclopedia Italiana, vol. 6, pp. 380-8
- 2002 “Meccanica dei Corpi Solidi e Fluidi”, in *Storia della Scienza*, Roma, Istituto dell’Enciclopedia Italiana, vol. 6, pp. 129-34
- 2002 “I *Principia* di Newton nel Settecento”, in *Storia della Scienza*, Roma, Istituto dell’Enciclopedia Italiana, vol. 6, pp. 446-53
- 2002 “Dedurre dai fenomeni: alcune considerazioni sulla derivazione della legge dell’inverso del quadrato nei *Principia* di Newton”, *Nuova Civiltà delle Macchine* 20(2), pp. 119-28
- 2002 “Analysis and Synthesis in Newton’s Mathematical Work”, in I.B Cohen and G. Smith (eds.) *Companion to Newton*, Cambridge University Press, pp. 308-28
- 2002 “Geometry, the Calculus and the Use of Limits in Newton’s *Principia*”, in *The Application of Mathematics to the Sciences of Nature: Critical Moments and Aspects*, eds. P. Cerrai, P. Freguglia, and C. Pellegrini, Kluwer Academic Publishers, pp. 223-32

- 2001 “Thomas Reid’s Mathematical Manuscripts: a Preliminary Survey”, *Reid Studies* 5(1), pp. 71-86
- 2000 “Matematica e Alchimia in Newton”, *Nuova Civiltà delle Macchine* 18(3), pp. 26-41
- 2000 “Thomas Reid e l’Eredità Matematica Newtoniana”, in *Filosofia e Cultura nel Settecento Britannico: II. Hume e Hutcheson. Reid e la Scuola di Senso Comune*, A. Santucci ed., Il Mulino, pp. 301-13
- 1999 “Letter to the Editor”, *Historia Mathematica* 26, pp. 292-4
- 1999 “Abraham De Moivre”, “John Colson”, “Willian Emerson”, “Thomas Simpson”, “William Davis”, “Brook Taylor”, “William Jones”, “Charles Hutton”, “Matthew Stewart”, in *Dictionary of Eighteenth Century British Philosophy*, John W. Yolton and John V. Price eds., Thoemmes Press
- 1999 “Newtons Methode und Leibniz’ Kalkül”, in *Geschichte der Analysis*, H. N. Jahnke ed., Spektrum Akademischer Verlag, pp. 89-130 [English transl. in *History of Analysis*, American Mathematical Society Press, 2003; Czech transl., *Historie Analýzy*, Math Publishing, Pardubice, Czech Republic, 2007]
- 1999 “Bifocal mathematicians”, *Studies in History and Philosophy of Science* 30, pp. 183-89 [essay review of Helena M. Pycior, *Symbols, impossible numbers, and geometric entanglements: British algebra through the commentaries on Newton’s Universal Arithmetick*]
- 1998 “Did Newton Use His Calculus in the *Principia*?”, *Centaurus* 40, pp. 303-44
- 1998 “I Principia di Newton: il Dibattito sui Metodi Matematici per

la Filosofia Naturale dal 1687 al 1736”, in E. Bellone and G. Boniolo (eds.) *Storia e Filosofia della Scienza: un Possibile Scenario Italiano*, Il Milano, pp. 113-22

- 1997 “Metodi geometrici e metodi analitici a confronto: il caso della legge delle aree nei *Principia* di Newton”, *Nuova Secondaria* 15, pp. 39-40
- 1996 “An episode in the History of Dynamics: Jakob Hermann’s Proof (1716) of Proposition 1, Book 1, of Newton’s *Principia*”, *Historia Mathematica* 23(2), pp. 167-81
- 1996 “Stars and Gravitation in Eighteenth Century Newtonian Astronomy: the Hypotheses of Benjamin Worster, Nicholas Saunderson, Gowin Knight, Roger Boscovich and William Herschel”, in *Copernico e la Questione Copernicana in Italia*, Olschki, pp.263-80
- 1995 “The Fermi-Dirac Statistics: a simultaneous discovery”, in *The Foundations of Quantum Mechanics*, Kluwer Academic Publishers, pp. 357-67 [with Gianluca Introzzi]
- 1995 “Johann Bernoulli, John Keill and the Inverse Problem of Central Forces”, *Annals of Science* 52, pp. 537-75
- 1994 “Three Traditions in the Calculus: Newton, Leibniz and Lagrange”, in *Companion Encyclopaedia of the History and Philosophy of the Mathematical Sciences*, I. Grattan-Guinness (ed.), Routledge, pp. 308-317
- 1993 “Newton and British Newtonians on the Foundations of the Calculus”, in *Hegel and Newtonianism*, M. J. Petry (ed.), Kluwer Academic Publishers, pp. 167-77
- 1987 “Flowing Ducks and Vanishing Quantities”, in *Science and Imagination in XVIIIth Century British Culture*, Unicopli, pp.231-5

- 1986 “Modalità *de re* e Analisi Infinita in Leibniz; una Nota su Alcune Recenti Interpretazioni”, *Lingua e Stile* 21, pp.105-20 [with Michele Di Francesco]
- 1985 “Gravitation and the Stars”, *Journal for the History of Astronomy* 16, pp.221-3
- 1984 “Una Risposta a Berkeley: Colin Maclaurin e i Fondamenti del Calcolo Flussionale”, *Epistemologia* 7, pp.207-24
- 1983 “Cambridge Mathematics and Algebra of Logic: Pure Analytics, Cauchy’s Methodology and Divergent Series”, in *Atti del Convegno Internazionale di Storia della Logica*, CLUEB, pp.295-300



“The Reception of Newton’s Fluxions in Europe”, in *The Reception of Isaac Newton in Europe*, Scott Mandelbrote and Helmut Pulte (eds.), Bloomsbury Press

“Mathematics and the New Science”, in *Handbook on the History of Physics*, Jed Buchwald and Robert Fox (eds.), Oxford University Press, 2014, pp. 226–264

“The Philosophy of mathematics and mathematical practice: the case of Isaac Newton’s conceptions of mathematical certainty and method”, *Fernando Gil Prize Lecture*, Calouste Gulbenkian Foundation

Essay Review of William L. Harper, *Isaac Newton’s Scientific Method: Turning Data into Evidence about Gravity & Cosmology* (2011) and Stefan Ducheyne, *The Main Business of Natural Philosophy: Isaac Newton’s Natural–Philosophical Methodology* (2012), in *Perspectives on Science* (2013)

“A Brief Introduction to the Mathematical Work of Isaac Newton”, in *The Cambridge Companion to Newton, 2d Edition*, edited by Robert Iliffe and George E. Smith, Cambridge University Press