

ABOUT NEWTON PRINCIPIA GENEVA EDITION

Raffaele Pisano (University of Lille, France)
& Paolo Bussotti (University of Udine, Italy)
Project: *Newton's Philosophiae Naturalis
Principia Mathematica Geneva Edition*
([1739-1742]1822)

Pisano & Bussotti's Newton Principia Geneva Edition International Project was born on 2010 during a Mathematical and Physical Workshop at the Italian Naval Academy in Livorno, Italy. Numerous events and publications on Newton Geneva Edition followed.

The aim of this two-day International Symposium is the Celebration of 200 years (1822–2022) since the publication of Newton's *Philosophiae Naturalis Principia Mathematica Geneva Edition* ([1739–1742]1822). Due to the continuing global pandemic it was not possible to organize it in 2022. It is hosted by the History of Physics and Applied Science & Technologies Team (HOPAST) at IEMN, France | Institute of Electronics, Microelectronics and Nanotechnology (IEMN), CNRS–University of Lille, France | Department of Humanities and Cultural Heritage (DIUM), University of Udine, Italy, and the Centre for the History and Philosophy of Physics (HAPP), University of Oxford, UK | The British Society for the History of Mathematics, UK. In particular the aim is to bring together new research—and—interdisciplinary perspectives from history, mathematics, and physics to explore the context of Newton's Science, his *Principia* (1687) and his (post-edited) *Principia Geneva Edition* (1822 in Glasgow), to increase our understanding of the subject.

Invited International Scientific Committee Members

- ANAKKAR Abdelkader, University of Lille, France
- ASHBOURN Jo, HAPP Centre, University of Oxford, UK
- BSHM-British Society for the History of Mathematics
- BUSSOTTI Paolo, DIUM, University of Udine, Italy | IDTC
- CLERI Fabrizio, IEMN, University of Lille-CNRS, France
- FRANCKOWIAK Rémi, University of Lille, France
- KATSIAMPOURA Gianna, National and Kapodistrian University of Athens, Greece | IDTC
- KREINOVICH Vladik, University of Texas at El Paso, USA
- MARCACCI Flavia, Pontifical Lateran University, Vatican State | IDTC
- MONTGOMERY Link, Suffolk Boston University, USA
- OLIVEIRA R.E. Agamenon, Polytechnic School, Federal University of Rio de Janeiro, Brazil | IDTC
- PISANO Raffaele, IEMN, University of Lille-CNRS, France | IDTC | BSHM
- ROBERTS Julie, University of Melbourne, Australia
- SCHUSTER John, Champion College, Australia
- SKORDOULIS Kostas, National and Kapodistrian University of Athens, Greece | IDTC
- SOZZO Sandro, University of Udine, Italy

International Organizing Members

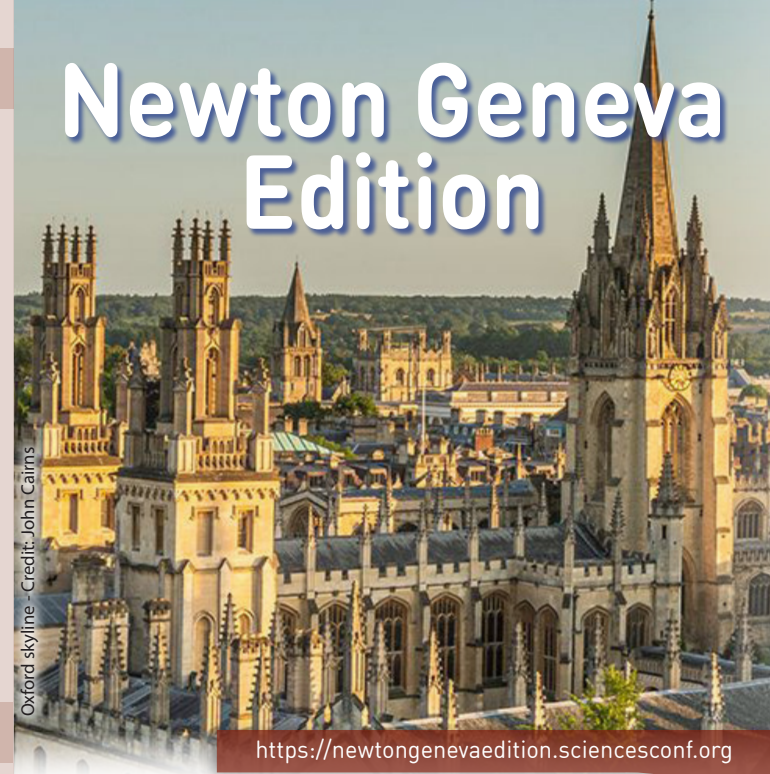
- ANAKKAR Abdelkader, University of Lille, France
- ANTZOULATOS Vangelis, Cl. Prepa. Lycée Fénelon, Cambrai, France
- ASHBOURN Jo, HAPP Centre, University of Oxford, UK
- BRUNETTI Dimitri, DIUM, University of Udine, Italy
- BUSSOTTI Paolo, DIUM, University of Udine, Italy | IDTC
- FRANCKOWIAK Rémi, University of Lille, France
- DURLO Andrea, Ph.D Student, IEMN, CNRS–University of Lille, France | IDTC
- LARIOS Nikolaos, National and Kapodistrian University of Athens, Greece | IDTC
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- ROBERTS Julie, University of Melbourne, Australia
- SOZZO Sandro, DIUM, University of Udine, Italy

IEMN Technical Support, University of Lille-CNRS, France

- AVELIN Herve, IEMN, University of Lille-CNRS, France
- DECROCK Matthieu, IEMN, University of Lille-CNRS, France
- DUCHENE Anne, IEMN, University of Lille-CNRS, France
- JAMME Clément, IEMN, University of Lille-CNRS, France
- LEFEBVRE Frederic, IEMN, Head of Administration, University of Lille-CNRS, France
- SENEZ Florence, IEMN, University of Lille-CNRS, France

► **Chairperson & Contact:** Raffaele PISANO,
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Newton Geneva Edition



Oxford skyline - Credit: John Cairns

<https://newtongenevaedition.sciencesconf.org>

Newton & Newton's *Philosophiae Naturalis Principia Mathematica Geneva Edition* ([1739-1742]1822)

22nd-23rd September 2023,
Centenary Room, University of Oxford, UK

HOPAST

History of Physics and Applied Sciences & Technology
Inquiring Historical Foundations of Sciences, Methods and Scientific Thought



Day 1. Friday 22nd September 2023

13h30-18h00 Welcome, Registrations Open & Help Desk

13h30-13h55 Official Opening & Welcome Ceremony

• **Plenary Session on *Newton***
Chairperson: Prof. Raffaele Pisano (France)

14h00-14h45 Prof. Rob Iliffe (UK) | *Where the Statues Stood: Newtonian Legacies in Post-Napoleonic Europe*

• **Plenary Session on *The Newton Principia Geneva Edition***
Chairperson: Prof. Flavia Marcacci (Vatican State)

15h00-15h45 Prof. Raffaele Pisano (France) & Prof. Paolo Bussotti (Italy) | *Introduction to Newton's Philosophiæ Naturalis Principia Mathematica Geneva Edition ([1739-1742]1822) as a Crucial Relationship between Physics-Mathematics: Oxford University Press Editorial Project, 5 Vols.*

16h00-16h45 Prof. Paolo Bussotti (Italy) & Prof. Raffaele Pisano (France) | *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*




Coffee Break

• **Plenary Session on *Newton & Newton Principia Geneva Edition in Context*** - Chairperson: Prof. Raffaele Pisano (France)

17h15-17h45 Open Roundtable Debate* Part I: Speakers & Participants

18h00 End of the Working Day 1

• **Plenary Session *Gala Newton & Newton Principia Geneva Edition 2023*** - Chairperson: Dr. Jo Ashbourn (UK)

18h30-23h00  *Newton & Newton Geneva Edition 2023 Private Gala Dinner at The Randolph Hotel, UK*

Day 2. Saturday 23rd September 2023

9h00-9h30 Welcome, Registration Open & Help Desk

• **Plenary Session on *Newton & Newtonianism in its Intellectual Historical Context*** - Chairperson: Dr. Philip Beeley (UK)

10h00-10h45 Prof. David Wootton (UK) | *Voltaire and Newton's God*

• **Plenary Session on *The Newton Principia Geneva Edition***
Chairperson: Prof. Paolo Bussotti (Italy)

11h00-11h45 Prof. Flavia Marcacci (Vatican State) | *Cosmology and Astronomy in Newton's third Volume of the Principia Geneva Edition ([1739-1742]1822): Propositions XIII-XIV*



Lunch Break

13h00-13h45 Dr. Philip Beeley (UK) | *Helvetian Readings of Newton. The Geneva Edition of the Principia in the Context of the Scientific Networks of Cramer and Calandrini*

• **Plenary Session on *Newtonianism in its Historical Scientific Context*** - Chairperson: Dr. Jo Ashbourn (UK)

14h00-14h45 Prof. Sarah Hutton (UK) | *Debating Newtonianism in France, England and Italy. Emilie du Châtelet's critique of James Jurin*

• **Plenary Session on *Newton & Newton Principia Geneva Edition in Context*** - Chairperson: Prof. Raffaele Pisano (France)

15h00-15h45 Open Roundtable Debate* Part II: Speakers & Participants



Coffee break

• **Plenary Session on *Newton & Newton Principia Geneva Edition in Context*** - Chairperson: Prof. Rob Iliffe (UK)

16h00-16h45 Mr. Scott Mandelbrote (UK) | *Editing Newton's Principia from Cambridge to Glasgow, via Geneva and Rome*

17h00 End of the Working Day 2

17h15-17h30 **Official Closing of the Two-Day International Symposium *Newton & Newton Principia Geneva Edition 2023***

Briefs on *Newton Principia Geneva Edition*

The third edition of Newton's (1642-1727) *Principia Mathematica Philosophiæ Naturalis* (1726) adds some new important results to the two previous ones (1687, 1713). Between 1739-1742 a new extensively commented edition was published in Geneva. The editors were the mathematicians: Thomas Le Seur (1703-1770) and François Jacquier (1711-1788), belonging to the minim friars. The Swiss scientist Jean-Louis Calandrini (1703-1758) gave fundamental support to the edition with his physical notes on mechanics and mathematical explanations. The comments (footnotes) of the editors are more extensive than the Newtonian text itself.

This edition is composed of 3 vols., (the third one in 2 tomes). Newton's propositions are detailed, annotated—and—commented: mathematical and physical aspects, geometrical proofs, methodology, discoveries and advancements after Newton's works are astutely reported. Based on recent works, (Cfr. Pisano & Bussotti, and their current project, Oxford University Press, 5 vols. pre-print) et few recent works, the aim of *Newton Principia Geneva edition/ Symposium 2023* is to understand and explain: 1) the genesis of the edition: how did the editors grasp and expound Newton's methods? 2) the development of mathematical physics in the fertile period 1725-1740, 3) a comparison between the approach to mathematical physics of that epoch and Newton's original one and along its paradigm until C19th, 4) the role of the *Newton Principia Geneva Edition: why was the publication of a commented edition felt to be necessary?* By means of this International Symposium we would like a) to highlight both Newton's Science and the methodological aspects stressed by the French Geneva Edition editors, that is the progressive replacement of Newton's "geometry of infinity" with analytical methods. One of the editors' aims was also to preserve Newton's methodological heritage; b) to focus on the relationship between physics and mathematics read by means of history and historical epistemology of science. This item will be developed through insights deriving from the *Newton Geneva edition*; c) to offer room to discuss recent accomplishments and perspectives on the Newton Geneva Edition, d) to consider the *Newton Principia Geneva Edition* in the context of the spread of Newton's doctrine not only among physicists, but also among people who were interested in science, but were not scientists. One might speak, in some respect of the importance of popularization of *Newtonianism/Newton-Principia* Reception.