



International Study Group on the Relations Between
the HISTORY and PEDAGOGY of MATHEMATICS
An Affiliate of the International Commission on
Mathematical Instruction

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March 2023

This and earlier issues of the Newsletter can be downloaded from our website

<http://www.clab.edc.uoc.gr/hpm/>

These and other news of the HPM group are also available on the website

<http://grouphpm.wordpress.com/>

(the online and on time version of this newsletter).

NOTE FROM THE CHAIR

Dear friends,

I hope very much you enjoy our current Newsletter with great contributions from our members from around the world.

Recently we have had the survey of the Advisory Board and I am delighted to confirm that we have a few new members: Helena Durnova from Brno, Czech Republic, and Jean-Michel Delire, from Brussels, Belgium.

Some members have decided to step down, and we say thank you for your service, and good luck! You will see the updated list of Advisory Board at the end of this Newsletter. The Honorary members list is also updated as some long-standing Advisory Board members have retired from the board, but have, over many years,

contributed greatly to our work and outreach.

Our work on the development of the new website is continuing and Desiree Agterberg has so far done a great deal of development with the web-development team, including Costas, Ysette, Bjorn, and myself.

Finally, the news you have all been waiting for is yet to be slightly postponed. We are talking with the colleagues from the Mathematics Education Support Hub at Western Sydney University in Australia to help us organise the ICMI Satellite Meeting there in July 2024. We hope to have the concrete and final news about that in the next issue of the Newsletter. Until then, enjoy, keep safe, and spread the word about the history of mathematics!

Snezana Lawrence

MAA CONVERGENCE

Share Ideas for Teaching and Discover New Classroom Resources with Convergence

Since 2004, MAA Convergence has been both an online journal for using the history of mathematics to teach mathematics, and an ever-expanding collection of online resources for classroom use.



Convergence welcomes submissions of a variety of types:

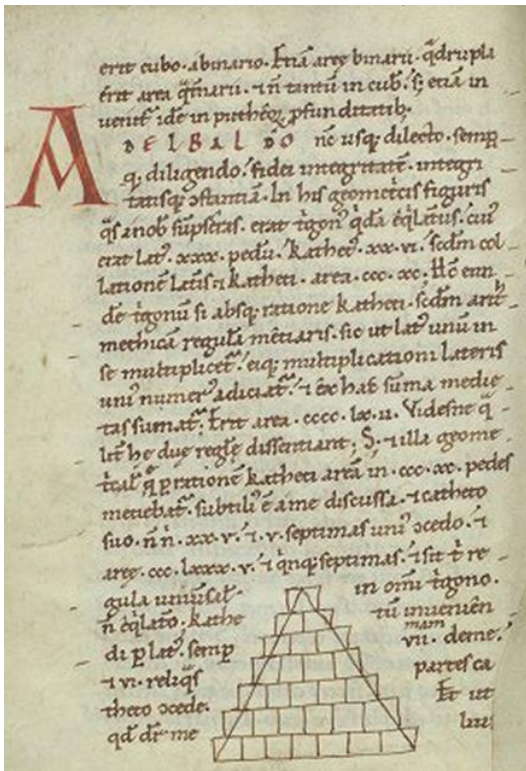
- classroom activities, projects, or modules for using history to teach mathematics;
- expository articles on the history of topics in the grades 8–16 mathematics curriculum that also provide suggestions for how to incorporate the content of the article into classroom teaching;

- translations of primary sources suitable for classroom use, accompanied by commentary explaining the work and its context and discussing how knowledge of the mathematical ideas in the translation can be used to teach the same ideas to today's students;
- testimonials reporting on the application of historical activities, projects, or modules, which may be original to the instructor or may have been previously published in Convergence or elsewhere;
- additions to Convergence features such as [Mathematical Treasures](#), [Portrait Gallery](#), [Problems from Another Time](#), [On This Day](#), [Today's Quotation](#), or [Conference Calendar](#).

More information is available in our Guidelines for Authors; questions and submissions may be directed to convergence@maa.org. Explore previous publications through the indexes and resources posted on our home page: <http://www.maa.org/press/periodicals/convergence>. Some of our newest articles are highlighted below.

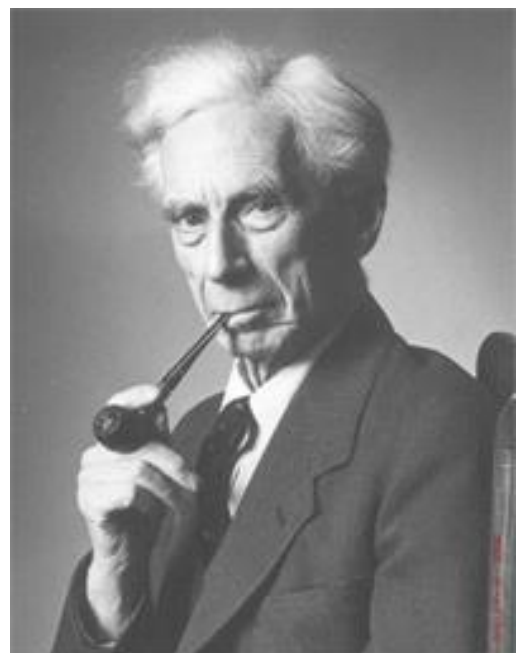
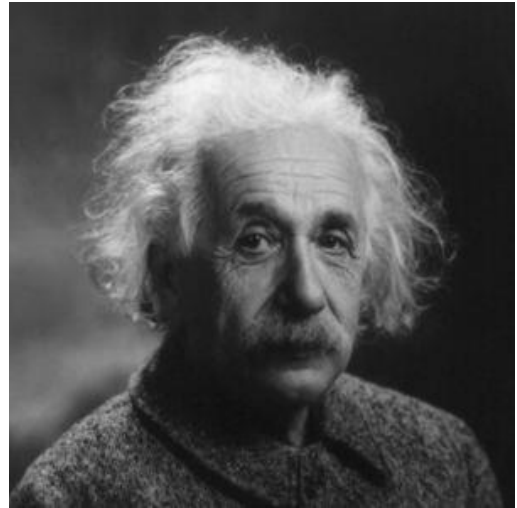
[“Need the Area of a Triangle? The Pope Can Help!”](#), by associate editor Betty Mayfield, is designed specifically for secondary students and pre-service teachers to engage in active reading and thinking about how to determine and derive theorems in geometry. Additionally, Betty spearheaded the development of one of Convergence's three new article series. [“Historically Speaking”](#) was a short column on the history of mathematics edited by Philip S.

Jones and Howard Eves that ran in NCTM's Mathematics Teacher between 1953 and 1969. The first installment presents Carl Boyer's "[The Quadrature of the Parabola: An Ancient Theorem in Modern Form](#)" alongside new commentary by William Dunham.



A letter by Gerbert d'Aurillac to Adalbold that discusses formulas for computing the area of a triangle. [12th-century Austrian manuscript](#) owned by the University of Pennsylvania Libraries.

Convergence is also pleased to have begun reprinting past associate editor Michael Molinsky's long-running column from the CSHPM/SCHPM Bulletin of the Canadian Society for History and Philosophy of Mathematics. "[Quotations in Context](#)" examines the origins and meanings of various quotations about mathematics and mathematicians, such as statements by Albert Einstein, Bertrand Russell, and Plato.



Albert Einstein and Bertrand Russell from Convergence's [Portrait Gallery](#).

Instructors and students new to reading, researching, and writing the history of mathematics will find a gentle introduction to the discipline's basic principles and theoretical approaches in "[HoM Toolbox, or Historiography and Methodology for Mathematicians](#)," by co-editor Amy Ackerberg-Hastings.

Finally, the ongoing collection of mini-Primary Source Projects from the TRIUMPHS team, “A Series of Mini-projects from TRansforming Instruction in Undergraduate Mathematics via Primary Historical Sources,” offers one new entry: [Fourier’s Infinite Series Proof of the Irrationality of \$e\$: A Mini-Primary Source Project for Second-Semester Calculus Students](#), by Kenneth M. Monks.

Amy Ackerberg-Hastings,
Independent Scholar, USA

Janet Barnett,
Colorado State University – Pueblo, USA
Editors, *MAA Convergence*

Have you read these?



Blum, A. (2022). Einstein’s second-biggest blunder: the mistake in the 1936 gravitational-wave manuscript of Albert Einstein and Nathan Rosen. *Archive for History of Exact Sciences*, 76(6), 623–632.

del Centina, A. (2022). Desargues’s concepts of involution and transversal, their origin, and possible sources of inspiration. *Archive for History of Exact Sciences*, 76(6), 573–622.

Ciocci, A. (2023). Federico Commandino and his Latin edition of Aristarchus’s *On the Sizes and Distances of the Sun and the Moon*. *Archive for History of Exact Sciences*, 77(1), 1–23.

Cogliati, A. & Rivis, R. (2022). The origins of the fundamental theorem of surface theory. *Historia Mathematica*, 61, 45–79.

Ehberger, M. (2022). The language of Dirac’s theory of radiation”: the inception and initial reception of a tool for the quantum field theorist. *Archive for History of Exact Sciences*, 76(6), 531–571. [See also correction in 77(1), 121-122]

Ehberger, M. (2023). A terminological history of early elementary particle physics. *Archive for History of Exact Sciences*, 77(1), 73–120.

Fukagawa, H. & Clark, D. (2022). Ajima's solution to the Gion shrine problem: A modern interpretation. *Historia Mathematica*, 61, 3–10.

Kragh, H. (2023). A terminological history of early elementary particle physics. *Archive for History of Exact Sciences*, 77(1), 73–120.

Martins, A. P. & Sousa, T. (2022). Formulations of the inclusion–exclusion principle from Legendre to Poincaré, with emphasis on Daniel Augusto da Silva. *British Journal for the History of Mathematics*, 37(3), 212–229.

Moyon, M. (2022). Mathématiques Savantes et Pratiques d'Artisan en Pays d'Islam à Travers la Division des Figures Planes. *Images des Mathématiques* (27 nov).

Pisati, A. & Rosso, R. (2022). Felice Casorati and the reception of Gaussian optics in Italy. *Historia Mathematica*, 61, 25–44.

Salas-García, I., Polo-Blanco, I. & González-López, M. J. (2022). Formulations of the inclusion–exclusion principle from Legendre to Poincaré, with emphasis on Daniel Augusto da Silva. *British Journal for the History of Mathematics*, 37(3), 238–257.

Siegmund-Schultze, R. (2022). Another look at the two Egyptian pyramid volume 'formulas' of 1850 BCE. *British Journal for the History of Mathematics*, 37(3), 171–178.

Unger, J. M. (2022). Mathematics and philology: An example from *wasan*. *Historia Mathematica*, 61, 18–24.

Wagenmakers, E.-J. & Ly, A. (2023). History and nature of the Jeffreys–Lindley paradox. *Archive for History of Exact Sciences*, 77(1), 25–72.

Wong, P. (2022). On a sangaku of Sugino'o Shrine (Yamagata) and Yamaguchi Kanzan's second trip. *Historia Mathematica*, 61, 11–17.

HPM Book Reviews

Compiled by Gail FitzSimons

Furinghetti, F. (2022). Book Review: A common ground of mathematics and mathematics education for the classroom and for researchers. Erich Christian Wittmann (2021) Connecting mathematics and mathematics education. Collected papers on mathematics education as a design science. *Educational Studies in Mathematics*, 111(2), 367–374. <https://doi.org/10.1007/s10649-022-10143-7>

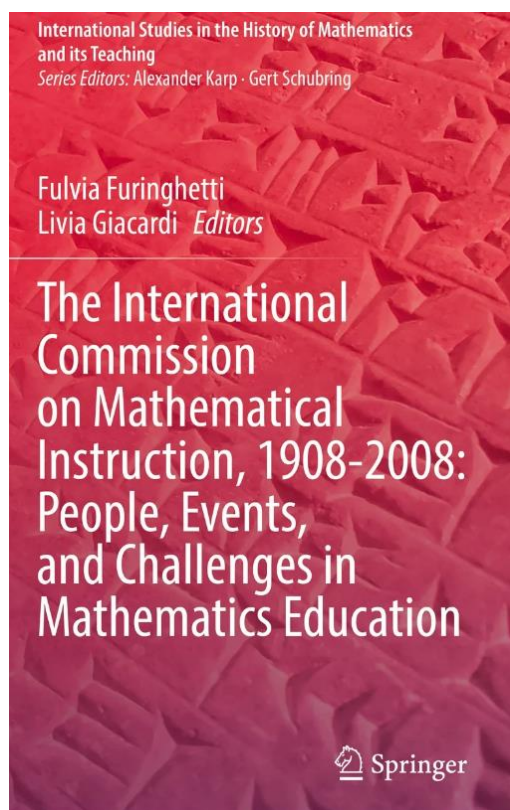
Please send references to gfi@unimelb.edu.au

The International Commission on Mathematical Instruction, 1908-2008: People, Events, and Challenges in Mathematics Education

Editors: Fulvia Furinghetti, Livia Giacardi

ISBN: 978-3-031-04313-0

<https://link.springer.com/book/10.1007/978-3-031-04313-0>



The book presents the history of ICMI through a prosopographical approach. In other words, it pays a lot of attention to the actors of the International movement. The portraits of the members of the ICMI Central Committees (1908-1936) and ICMI Executive Committees (1952-2008), and other eminent figures in ICMI history,

who have passed away in the first 100 years of its life, are the guiding thread of the volume.

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Fulvia Furinghetti, Livia Giacardi (pp. 43-94)

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Marta Menghini (pp. 95-135)

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Members

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*Fulvia Furinghetti
Livia Giacardi*

Announcements of Events

Forthcoming BSHM Meetings

The British Society for the
History of Mathematics

<http://www.bshh.ac.uk/events>

Christmas Meeting 2023

9 December, 2023

Online

HPM Administrative Structure

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(the online and on time version of this newsletter).

Items for the Newsletter should be sent to the editors, preferably by email (see addresses below).

The Newsletter appears three times a year with the following deadlines for next year.

No.	Deadline for material	Sent to distributors
113	12 June 2023	July 2023
114	12 October 2023	November 2023
115	12 February 2024	March 2024

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A note from the Editors

The Newsletter of HPM is primarily a tool for passing along information about forthcoming events, recent activities and publications, and current work and research in the broad field of history and pedagogy of mathematics. The Newsletter also publishes brief articles which they think may be of interest. Contributions from readers are welcome on the understanding that they may be shortened and edited to suit the compass of this publication.