

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

N° 105

November 2020

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).

A MESSAGE FROM HPM CHAIR

As we enter the final weeks of 2020 I think most of us will wish for some better days ahead in the forthcoming year. The pandemic has brought the world so much suffering and disruption it can safely be said that most of us haven't seen anything like this for decades or even within our lives. So, as we prepare for the end of this year, let us keep our hopes high, and our friendships and networks strong to see us through the 2021.

This year we have seen our organisation change in many ways: first we have had a great number of new additions to the Advisory Board! More than double of the previous membership means we will have many more colleagues to work with on various projects. We welcome all our new members! Our coverage of the global networks in the history and pedagogy of mathematics is now certainly greater than it was before, but there are many more places on the planet that surely have academics and teachers that are working in our field, so we should try to find friends and cooperators in those places too. Let us revisit this issue again in the not too distant future.

I also wish all the best to those who have served on the Advisory Board for many years and are now retiring or moving into Honorary Members category. Warm and grateful salutes - we will still very much look forward to seeing you all during the meetings whether real or virtual!

So let me address the questions about the meetings - we don't yet know whether we will be able to meet in person next year in China. I would of course like nothing more than for that to be possible, but we need to be realistic. In the UK, where I am based, we have been told via many media outlets that the hope is for 'normality' to return towards the end of next calendar year, with vaccinations beginning as early as December this year. Additionally, we don't yet have the final and formal decision of the ICMI. Hopefully this will be communicated soon, and it will certainly be very pertinent to our decision-making process about the ICMI satellite meeting and its format.

In the meantime, we can have online meetings. Many of our new Advisory Board members have welcomed the idea to start having a kind of *Research in Progress* meetings during which we can chat to each other and share our ideas and news about our new ventures and projects. (We have this in England every month, and it is a very nice and productive monthly event!)

We will begin with bi-monthly meetings of this kind, with the information to be announced on our Newsletter website shortly. In order for everyone to be able to join at some point during the year, we will have meetings at different times of day so we can offer all our Advisory Board members opportunities to attend these despite the different time zones.

Another great project we need to undertake soon is the creation of a new web presence – the new website which would contain all our publications as well as news and meeting schedules, and an area where we can engage more effectively with the events that are taking place in our field around the world. In order for that to happen though, we need to think carefully about this website's content. And before we get there, we must take account of the new and impending changes within ICMI.

Just a few days ago we have learnt that the structure of the ICMI will change and that there will be regrouping of the ICMI *Affiliated Organisations* and *Regional Conferences*. As the new ICMI Executive Committee takes office in January, we will put forward our vision of the HPM to them. So, there is much work to be done until then! And some festivities to enjoy in between - for which I wish you a very happy and relaxed time, a safety and health to you all and your families.

P. S.: I will look forward to seeing you at the virtual Research in Progress meeting soon!

> Snezana Lawrence, Cambridgeshire, Nov 16 2020



HPM 2020 History and Pedagogy of Mathematics (HPM) 2020 – Satellite Meeting of ICME-14

21–25 July 2020 New dates: 20–24 July 2021 University of Macau

Further information will be announced in the near future.



Website

The website is available at https://www.um.edu.mo/fed/HPM2020/ You can use the website as an efficient tool to help promote the HPM 2020 Satellite Meeting to colleagues and friends around the world, for online registration, and to obtain information on accommodation, excursions, and the conference program.

1. Aim and Focus

HPM 2020 is the tenth quadrennial meeting of the International Study Group on the Relations Between the History and Pedagogy of Mathematics—the HPM Group. The HPM Group is an affiliated study group of the International Commission on Mathematical Instruction (ICMI).¹ By combining the history of mathematics with the teaching and learning of mathematics, HPM connects the past and the future of mathematics. Therefore, the group aims to stress the conception of mathematics as a living science, a science with a long history, a vivid present, and an as yet unforeseen future.

These quadrennial meetings are a major activity of HPM to bring together individuals with a keen interest in the relationship between the history of mathematics and mathematics education. They include:

- Researchers in mathematics education who are interested in the history of mathematics and mathematical thinking;
- Mathematics teachers at all levels who are eager to gain insights into how the history of mathematics can be integrated into teaching and how they can help students to learn mathematics;
- Historians of mathematics who wish to talk about their research;
- Mathematicians who want to learn about new possibilities to teach their discipline; and
- All those with an interest in the history of mathematics and pedagogy.

¹ See

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HPM webpage: http://www.clab.edc.uoc.gr/hpm/ HPM Newsletter webpage: http://grouphpm.wordpress.com/

https://www.mathunion.org/icmi/organization/affili ated-organizations

2. Time and Place

The 2020 HPM Conference will be held in summer of 2021 at the University of Macau in SAR Macao, China. With a fascinating history of 400 years of cultural exchanges between the East and the West, Macao is unique in its cultures and society. It boasts many cultural treasures of all types, including picturesque dwellings in traditional styles, ancient temples built during the Ming and Qing buildings with dynasties, Southern European architectural features, baroque style churches and impressive contemporary structures. In July 2005, the historic district collectively known as the "Historic Centre of Macao" was inscribed on the UNESCO World Heritage List. Today, Macao is a Special Administrative Region (SAR) of the People's Republic of China, benefiting from the "one country, two systems" policy. Macao SAR is growing in the number and diversity of its attractions; the greatest of these continues to be Macao's unique society, with communities from the East and the West complementing each other. It offers a perfect environment for an international conference.

Please note that HPM 2020 takes place after the conclusion of ICME-14 in **Shanghai, China.** Its scientific program includes oral presentations and activities on the history and pedagogy of mathematics (TSG 27) and on the history of mathematical teaching (TSG 55).

3. HPM 2020 Topics

The program and activities of HPM 2020 are structured around the following topics:

1. Theoretical and/or conceptual

frameworks for integrating history in mathematics education.

- 2. History and epistemology in students' and teachers' mathematics education: Classroom experiments and teaching materials.
- 3. Original sources in the classroom and their educational effects.
- 4. Mathematics and its relation to science, technology, and the arts: Historical issues and interdisciplinary teaching and learning.
- 5. Cultures and mathematics fruitfully interwoven.
- 6. Topics in the history of mathematics education.
- 7. History of Mathematics in China and Eastern Asia.

4. Activities During the 2020 HPM Conference

The HPM Conference is a place where mathematicians, educators, historians, researchers, and students can make presentations and participate in discussions.

The program includes:

- plenary lectures;
- panels;
- workshops;
- parallel sessions where participants present research reports;
- poster exhibitions; and
- exhibitions of books and other didactical material.

Plenary sessions and the panel deal with the main topics of the conference. Plenary speakers and panelists are invited by the International Program Committee (IPC).

Social activities include a gala dinner and excursions.

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5. Plenary Lectures and Panel

[As originally invited; confirmations for 2021 participation are pending.]

Plenary Lectures:

History of Mathematics as a Way of Relating to Mathematics of the Past: The Case of Edmond Halley and Apollonius

Michael N. Fried, Ben Gurion University of the Negev, Beer-Sheva, ISRAEL

"I would like to introduce history in my mathematics lessons but I do not know how to do it!"

Marc Moyon, University of Limoges, FRANCE

Using Original Sources in the Classroom to Enrich the Mathematical Learning Experience

Mary Flagg, University of St. Thomas, Houston, Texas, USA

Mathematical World (or Worlds?) in the Context of HPM

Man Keung Siu, The University of Hong Kong, Hong Kong SAR, CHINA

Algebra in Swedish Mathematics Textbooks During the Era of Great Power

Johanna Pejlare, Chalmers University of Technology and the University of Gothenburg, SWEDEN

Matteo Ricci and the Introduction of Euclid's Elements in China

Luis Saraiva, University of Lisbon, PORTUGAL

Plenary Panel:

History of Mathematics Education in China: Its Features, Influences, and Modern Values

Yiwen Zhu (Panel Coordinator), *Sun Yatsen University*, The city of Guangzhou, Guangdong Province, CHINA

(With panel member Shuyuan Pan, CHINA; Shirong Guo, CHINA; and Alexei Volkov, TAIWAN, CHINA)

6. Official Languages

The official languages of the conference are English and Chinese. Oral presentations will be given in either English or Chinese.

7. Proceedings

Full texts for inclusion to the HPM 2020 Proceedings will be submitted after HPM 2020 and will be further reviewed by members of the IPC by the usual international standards. In all other cases, abstracts that have been accepted and presented at the conference meeting in Macao will also be included in these *Proceedings*. Details on the procedure and the deadline for submitting full texts, their size, the format guidelines, and the expected date by which the proceedings will be available to all registered participants, will be announced in due course in the HPM 2020 website (https://www.um.edu.mo/fed/HPM2020) and the HPM website (http://www.clab.edc.uoc.gr/hpm).

8. Important Dates

More details will be provide in the future.

9. Registration Fees

More details will be provide in the future.

10. *Accommodation* More details will be provide in the future.

11. Visits and Excursions

More details will be provide in the future.

12. TheInternationalProgramCommittee (IPC)The IPC includes the following groups:

HPM 2020 Chairs

Snezana Lawrence, Middlesex University (UK), Chair Chuang Wang, University of Macau (Macao), Co-Chair Xuhua Sun, University of Macau (Macao), Co-Chair

HPM Executive Committee

Évelyne Barbin (France), former chair 2008-2012 Ewa Łakoma (Poland) Frédéric Métin (France) Luis Puig (Spain) Michael N. Fried (Israel)

Participating HPM Advisory Board Members

Luis Carlos Arboleda (Colombia) Janet Barnett (USA) Aline Bernardes (Brasil) Nathalie Chevalarias (France) Renaud Chorlay (France) Cecilia Costa (Portugal) Cecilia Costa (Portugal) Teresa Costa (Portugal) Adriano Demattè (Italy) Olivera Đokić (Serbia) Florence Fasanelli (USA), former chair 1988-92 Gail FitzSimons (Australia) David Guillemette (Canada) Sunwook Hwang (Korea) Masami Isoda (Japan) Uffe Thomas Jankvist (Denmark) Tinne Hoff Kjeldsen (Denmark) Dominic Klyve (USA) Tsang-Yi Lin (Taiwan) Po-Hung Liu (Taiwan) Maria Rosa Massa-Esteve (Spain) Iran Mendes (Brasil) Marc Moyon (France) Garrod Musto (UK) Kostas Nikolantonakis (Greece) Antonio M. Oller-Marcén (Spain) Maurice OReilly (Ireland) Danny Otero (USA) Johanna Pejlare (Sweden) David Pengelley (USA) Hélder Pinto (Portugal) Johan Prytz (Sweden) Peter Ransom (UK) Leo Rogers (UK) Sebastian Schorcht (Germany) Gert Schubring (Germany) Man Keung Siu (China) Bjørn Smestad (Norway) Yi-Wen Su (Taiwan) Constantinos Tzanakis (Greece) Desiree van den Bogaart (Netherlands) Caterina Vicentini (Italy) Ysette Weiss (Germany) Greicy Winicki-Landman (USA)

13. The Local Organizing Committee (LOC)

Co-Chairs: Chuang Wang, Pak Sang Lou

Co-Associate Chairs: Kong Chi Meng

UM Members: Kwok Cheung Cheung, Boby Ho-Hong Ching; Chunlian Jiang, Xiaoqing Jin

Macao School Members: Hong Yuan Hong, Ian Nam Wong, Tak Seng Lai, Sao Kei Si, Ka Lei Che

Mainland Committee:

Wang Xiaoqin (East China Normal University)

Ji Zhigang (School of History and Culture of science, Shanghai Jiao Tong University)

Xu Zelin (Donghua University)

Song Naiqing (Southwest University, China)

Zou Dahai (Chinese Academy of Sciences)

Zhang Hong (Sichuan Normal University)

Dai Qin (Inner Mongolia Normal University)

Cao Yiming (School of Mathematical Sciences, Beijing Normal University)

Pu Shuping (College of Elementary Education, Chongqing Normal University)

Taiwan Committee:

Liu Po-hung (National Chin-Yi University of Technology)

Jia-Ming Ying (National Taipei University of Education)

Tung-Shyan Chen (National Chin-Yi University of Technology)

Hong Kong Committee:

Chan Yip-Cheung (Chinese University of Hong Kong)

Wong Ka-Lok (University of Hong Kong)

Tang Mei-yue (formerly Hong Kong Education and Manpower Bureau)

14. Contact

For further information, please contact:

- Snezana Lawrence (Chair), snezana@mathsisgoodforyou.com
- Xuhua Sun (Co-Chair), hpm2020macao@gmail.com

HPM Newsletter No. 105 November 2020 HPM webpage: <u>http://www.clab.edc.uoc.gr/hpm/</u> HPM Newsletter webpage: <u>http://grouphpm.wordpress.com/</u>



CREPHIMat

The Brazilian Reference Center for Research on the History of Mathematics / Centro Brasileiro de Referência em Pesquisa sobre História da Matemática



Centro Brasileiro de Referência em Pesquisa sobre História da Matemática

Creation /Criação: 2019 Coordinator / Coordenador: Iran Abreu Mendes Home page: <u>http://www.crephimat.com/</u>

[English]

Release:

The Brazilian Center for Reference in Research on the History of Mathematics -CREPHIMat is a Virtual Reference Center, developed in Brazil, from two projects funded by CNPq, which provides information on the research productions in the History of Mathematics carried out in Brazil, publications and teaching materials related to this theme of scientific studies. Our main objective is to contribute to the actions of professors, researchers and students interested in this area of study and research.

We request the submission of suggestions for improving our space, as well as teaching materials, image records, videos, among other teaching instruments that enrich our collection, so that we can expand the information to be circulated among the academic community in this virtual environment.

More information

The Brazilian Reference Center for Research on the History of Mathematics -CREPHIMat was created to carry out one of the actions of two research projects coordinated by Prof. Dr. Iran Abreu Mendes, with funding from CNPq, to disseminate the production of studies and research in the history of mathematics. The first project, entitled History for the Teaching of Mathematics in Teacher Education and Basic Education: an Analysis Brazilian Production. of investigates the ways, meanings and modalities of approaches to research in the History of Mathematics and proposals for their didactic use in teaching mathematics classes. The central purpose is to question how the production of theses and dissertations in history for the teaching of mathematics are used by teachers of mathematics in public schools of basic education? How do teachers receive the productions from these studies? Are the methodological proposals for teaching mathematics, supported by historical information, included in textbooks adopted in schools in Brazil? The second project, entitled A history of research in the History of Mathematics in Brazil: productions, disseminations and contributions to the

HPM Newsletter No. 105 November 2020 HPM webpage: <u>http://www.clab.edc.uoc.gr/hpm/</u> HPM Newsletter webpage: <u>http://grouphpm.wordpress.com/</u> *formation of mathematics teachers*, intends to describe and analyze how the historical, epistemological, pedagogical and patrimonial scenarios in the area of History of Mathematics has been configured in Brazil since 1990. The analysis of the production generated in the research in this area of knowledge will allow us to point out possibilities for its use in teaching, in the formation and in the action of teachers.

[Portuguese]

Release:

O Centro Brasileiro de Referência em Pesquisa sobre História da Matemática – CREPHIMat se constitui em um Centro Virtual de Referências, desenvolvido no Brasil a partir de dois projetos financiados pelo CNPq, que disponibiliza informações sobre as produções de pesquisas em História da Matemática realizadas no Brasil, publicações e materiais didáticos relativos a esta temática de estudos científicos. Nosso principal objetivo é contribuir com as ações de professores, pesquisadores e estudantes interessados nesta área de estudo e pesquisa.

Solicitamos o envio de sugestões para melhoria de nosso espaço, bem como materiais didáticos, registros de imagens, vídeos, dentre outros instrumentos didáticos que enriqueçam nosso acervo, de modo que possamos ampliar as informações a serem socializadas com a comunidade acadêmica neste ambiente virtual.

Mais Informações

O Centro Brasileiro de Referência em Pesquisa sobre História da Matemática – CREPHIMat foi idealizado para concretizar uma das ações de dois projetos de pesquisa coordenados pelo Prof. Dr. Iran Abreu Mendes, com financiamento do CNPq, para disseminação das produções de estudos e pesquisas em história da matemática. O primeiro projeto, intitulado História para o Ensino da Matemática na Formação de Professores e na Educação uma Análise Básica: da Produção Brasileira, investiga os modos, sentidos e modalidades de abordagem das pesquisas em História da Matemática e suas propostas para uso didático nas aulas de Matemática. O propósito central é questionar como as produções em teses e dissertações em História para o ensino de Matemática são utilizadas pelos professores de Matemática das escolas públicas da Educação Básica? De que modo os professores recebem as produções advindas desses estudos? As propostas metodológicas de ensino de Matemática, apoiadas nas informações históricas, são contempladas nos livros didáticos adotados nas escolas do Brasil? O segundo projeto, intitulado Uma história das pesquisas em História da Matemática no Brasil: produções, disseminações e contribuições à formação de professores de Matemática, pretende descrever e analisar como o cenário histórico, epistemológico, pedagógico e patrimonial da área de História da Matemática encontra-se configurado no Brasil a partir de 1990. A análise da produção gerada nas pesquisas nessa área de conhecimento permitirá apontar suas possibilidades de seus usos na docência, na formação e na ação dos professores.



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Ageron, P. & Hedfi, H. (2020). Ibrāhīm al-Balīshṭār's book of arithmetic (ca. 1575): Hybridizing Spanish mathematical treatises with the Arabic scientific tradition. *Historia Mathematica*, *52*, 26–50.

Arnal-Bailera, A. & Oller-Marcén, A. M. (2020). Prospective secondary mathematics teachers read Clairaut: professional knowledge and original sources. *Educational Studies in Mathematics, 105*, 237–259. <u>https://doi.org/10.1007/s10649-020-09988-7</u>

Bair, J.; Błaszczyk, P.; Guillén, E.; Heinig, P.; Kanovei, V. & Katz, M. (2020). Continuity between Cauchy and Bolzano: issues of antecedents and priority. *British Journal for the History of Mathematics*. Published online: 5 Jun 2020.

Basyal, D. (2020). A mathematical poetry book from Nepal. *British Journal for the History of Mathematics*. Published online: 13 Aug 2020.

Del Centina, A. (2020). Pascal's *mystic hexagram*, and a conjectural restoration of his lost treatise on conic sections. *Archive*

for History of Exact Sciences, 74(5), 469–521.

Henry, J. (2020). Primary and Secondary Causation in Samuel Clarke's and Isaac Newton's Theories of Gravity. *Isis*, *111(3)*, 542–561.

Hollings, C. D. & Parkinson, R. B. (2020). Two letters from Otto Neugebauer to Thomas Eric Peet on ancient Egyptian mathematics. *Historia Mathematica*, *52*, 66–98.

Kromhout, M. J. (2020). The Unmusical Ear: Georg Simon Ohm and the Mathematical Analysis of Sound. *Isis*, *111(3)*, 471–492.

Rabouin, D. & Arthur, R. (2020). Leibniz's syncategorematic infinitesimals II: their existence, their use and their role in the justification of the differential calculus. *Archive for History of Exact Sciences*, 74(5), 401–443.

Raynaud, R. (2020). Mathématiques et architecture: le tracé de l'*entasis* par Nicolas-François Blondel. *Archive for History of Exact Sciences*, 74(5), 445–468.

Unger, J. M. (2020). On the acceptance of trigonometry in *wasan*: Evidence from a text of Aida Yasuaki. *Historia Mathematica*, *52*, 51–65.

Zhu, Y. (2020). How do we understand mathematical practices in non-mathematical fields? Reflections inspired by cases from 12th and 13th century China. *Historia Mathematica*, *52*, 1–25.



Milestones in Analog and Digital Computing



Bruderer, Herbert: *Milestones in Analog and Digital Computing*, Springer Nature Switzerland AG, Cham, 3rd edition 2020, 2 volumes, 2075 pages, 715 illustrations, 151 tables, https://www.springer.com/de/book/9783030409739

This Third Edition is the first Englishlanguage edition of the award-winning Meilensteine der Rechentechnik, illustrated in full color throughout in two volumes. The Third Edition is devoted to both analog and digital computing devices, as well as the world's most magnificient historical selected automatons and scientific instruments (employed in astronomy, surveying, time measurement, etc.). It also features 20 step-by-step user instructions for historical analog and digital mechanical calculating machines and instruments, and is the only such historical book with comprehensive German-English and English-German glossaries of technical

terms (with over 5,000 entries) not found in print or in online dictionaries. The book also includes a very extensive bibliography (with over 6,000 entries) based on the literature of numerous countries around the world.

The book features new information on recently discovered mathematical instruments, including the Multiple Curta (the world's smallest mechanical parallel calculator) and the world's largest mass produced Loga cylindrical slide rules, in addition to a survey of the research on the Antikythera mechanism.

Meticulously researched. the author conducted a worldwide survey of science, technology and art museums with their main holdings of analog and digital calculating and computing machines and devices, historical automatons and selected scientific instruments in order to describe a broad range of masterful technical achievements. Also covering the history of mathematics and computer science, this work documents the cultural heritage of technology as well.

Most comprehensive book on the history of computing, consisting of two volumes encompassing 2,075 pages, with 715 illustrations (some 280 of which are new to this edition) and 151 tables (about 50 of which are new to this edition).

Herbert Bruderer is a lecturer (retired) in the Department of Computer Science of the Eidgenössische Technische Hochschule (ETH) Zurich and a historian of technology. He is the author of numerous books and has been awarded several prizes.

Herbert Bruderer

herbert.bruderer@bluewin.ch bruderer@retired.ethz.ch October 2020

HPM BOOK REVIEWS

Please send references to <u>gfi@unimelb.edu.au</u>

Educational Studies in Mathematics 2013 -2020

Robert George Stein (2013)

Nerida Ellerton & M. A. (Ken) Clements (2012). *Rewriting the history of school mathematics in North America 1607-1861: The central role of cyphering books*. <u>https://www.springer.com/gp/book/97894</u> <u>00726383</u>

Educational Studies in Mathematics, 82(1), 165–167.

Vadim Kaimanovich: A Book about Russian mathematics education [2 vols.]. (2013)

Alexander Karp & Bruce Vogeli (2010). *Russian mathematics education: History and world significance*. <u>https://www.worldscientific.com/worldsci</u>

books/10.1142/7329

&

Alexander Karp & Bruce Vogeli. (2011). *Russian mathematics education: Programs and practices*. https://www.worldscientific.com/worldsci

books/10.1142/7892

Educational Studies in Mathematics, 84(1), 169-175.

See also: Phillips, Y. (2012). Alexander Karp and Bruce R. Vogeli (Eds): Russian mathematics education: history and world significance. Series on mathematics education. *ZDM Mathematics Education*, *44*, 453–455.

https://doi.org/10.1007/s11858-012-0413-2

Snezana Lawrence: The power of a great introduction. (2016)

Alexander Karp, & Gert Schubring (Eds.). (2014). *Handbook on the history of mathematics education*. <u>https://www.springer.com/gp/book/97814</u> 61491545

Educational Studies in Mathematics, 92(2), 279-283.

Brian Greer (2017)

Sacha La Bastide-van Gemert; Marianne Vincken; & William Third (2015). *All* positive action starts with criticism: Hans Freudenthal and the didactics of mathematics.

https://www.springer.com/gp/book/97894 01793339

Educational Studies in Mathematics, 95(1), 113-122.

Nerida Ellerton (2018)

NCTM's *Compendium*: Finding a balance between historical details, contemporary practices, and future resources. Jinfa Cai (Ed.) (2017) *Compendium for Research in Mathematics Education*. *Educational Studies in Mathematics*, 99(1), 109-123.

Fulvia Furinghetti (2019)

Book review: The long story of the history in mathematics education. Kathleen M. Clark, Tinne Hoff Kjeldsen, Sebastian Schorcht, & Constantinos Tzanakis (Eds.) (2018). *Mathematics, education and history. Towards a harmonious partnership.* https://www.springer.com/gp/book/97833 19739236 Educational Studies in Mathematics, 100(1), 109-116.

Michèle Artigue (2019)

Book review: *The legacy of Felix Klein*. H.-G. Weigand, W. McCallum, M. Menghini, M. Neubrand and G. Schubring (Eds.) (2019).

https://www.springer.com/gp/book/97833 19993850

Educational Studies in Mathematics, 102(1), 147-152.

Marta Menghini (2020)

Book Review: Digging into the memory of mathematics education. Fulvia Furinghetti, Alexander Karp (Eds.) (2018). *Researching the history of Mathematics education. An international overview.* <u>https://www.springer.com/gp/book/97833</u>

<u>19682938</u>

Educational Studies in Mathematics, 103(3), 383-389.

Anne Teppo (2020)

International Reflections on the Netherlands Didactics of Mathematics. Visions on and Experiences With Realistic Mathematics Education. Marja van den Heuvel-Panhuizen (Ed.) (2020). https://www.springer.com/gp/book/97830 30202224

&

National Reflections on the Netherlands Didactics of Mathematics. *Teaching and Learning in the Context of Realistic Mathematics Education*. Marja van den Heuvel-Panhuizen (Ed.) (2020). <u>https://www.springer.com/gp/book/97830</u> 30338237

Educational Studies in Mathematics, 104(2), 285-298.

Kristín Bjarnadóttir (2020)

Approaching the core of the modern mathematics movement. Rods, Sets and Arrows – The Rise and Fall of Modern Mathematics in Belgium. Dirk De Bock & Geert Vanpaemel (2019). https://www.springer.com/gp/book/97830 <u>30205980</u>

Educational Studies in Mathematics, 104(3), 431-438.

Compiled by Gail FitzSimons



Announcements of Events

14[™] INTERNATIONAL CONGRESS ON MATHEMATICAL EDUCATION (ICME-14)

> *New dates: July 11–18, 2021* Shanghai, China

https://www.icme14.org/static/en/index.ht ml

For more details on the complete scientific programme of ICME-14 and its structure and time-schedule, as well as on practical details, the registration process, the venue and social events, visit the official ICME-14 website https://www.icme14.org.

A major part of the scientific program of the ICMEs consists of Topic Study Groups (TSG). These are mini conferences designed to gather a group of the Congress participants who are interested in a particular area of Mathematics Education. During ICME-14, there will be 62 TSGs in total.



TSG 27: The role of the history of mathematics in mathematics education

Chair: K. M. Clark (USA), kclark@fsu.edu Co-Chair: C. Tzanakis (Greece), tzanakis@edc.uoc.gr

> TSG 55: History of teaching and learning mathematics

Chair: Wagner Rodrigues Valente (Brazil), Co-Chair: Alexander Karp (USA)





Forthcoming BSHM Meeting

The British Society for the History of Mathematics http://www.bshm.ac.uk/events

1. Marriages, Couples, and the Making of Mathematical Careers

29 – 30 April, 2021 Online, possibly with local hubs

http://www.mcs.st-andrews.ac.uk/bshmcshpm/index.shtml

This workshop proposes to explore the role of marriage and other domestic partnerships in the lived practice and constructed memory of mathematics.

Confirmed speakers include:

Brigitte Stenhouse, PhD candidate, Open University, UK Co-organizer: On Mary and William Somerville

David Dunning, Postdoc, Oxford, UK Coorganizer: On George and Mary Everest Boole

Ursula Martin, Professor, Oxford, UK: On computing pioneers

Reinhard Siegmund-Schultze, University of Agder, Norway: On Hilda Geiringer and Richard Von Mises Jenne O'Brien, Ph.D. Candidate, Princeton, USA: On the roles of Elise Riemann and Emilie Weber in the making of Riemann's collected works

Donald Opitz, De Paul University, USA, and Brigitte van Tiggelen, Mémosciences, Belgium: Collaborative couples in the sciences

2. History of Decision Mathematics

15 May, 2021 London, UK

The 2021 event will be the sixth of these conferences, and will look at the history of decision mathematics. The day is likely to include six speakers on various aspects of decision mathematics. This is the meeting postponed from May 2020.

3. People, Places, Practices: Joint BSHM-CSHPM/SCHPM conference

New dates: 12–14 July 2021 University of St. Andrews, UK

http://www.mcs.st-andrews.ac.uk/bshmcshpm/index.shtml

People, Places, Practices, is the 5-yearly joint conference of the British Society for the History of Mathematics and Canadian Society for History and Philosophy of Mathematics/La Société Canadienne d'Histoire et de Philosophie des Mathématiques, in collaboration with HOM-SIGMAA, the History of

Mathematics Special Interest Group of the MAA.

The conference is hosted by the School of Mathematics and Statistics, St Andrews University, the home of the MacTutor History of Mathematics Archive.

An Education Strand within the conference will run on dates to be confirmed. This will provide practical talks and workshops for those teaching the 15+ age group. Professor Évelyne Barbin, author of *Let History into the Mathematics Classroom* will talk about the French experience, where history of mathematics has recently been made a required part of the secondary mathematics curriculum.

Confirmed invited speakers include Karen Parshall, Colm Mulcahy, Évelyne Barbin, Edmund Robertson, Valeria Giardino, Brendan Larvor, Robin Wilson, Serafina Cuomo.

The organising committee are: Maria Zack (CSHPM), Dirk Schlimm (CSHPM), Amy Shell-Gellasch (HOMsigmaa), Mark McCartney (BSHM), Isobel Falconer (BSHM)

The education subcommittee are: Chris Pritchard (BSHM & Scottish Mathematical Council), Amy Shell-Gellasch (HOMsigmaa), Danny Otero (HOMsigmaa), Snezana Lawrence (BSHM), Isobel Falconer (BSHM).

For further details of the conference and venue, see <u>http://www.mcs.st-andrews.ac.uk/bshm-cshpm/index.shtml</u>

4. History of Mathematics and Flight

New date: 11 September 2021 Manchester Airport, UK

A day of talks about the history of mathematics and flight. Flight will be broadly conceived to cover the flight of man-made objects, animals, and even fugitives; flight formation, navigation and control.

The day will include an optional tour of the Concorde flight deck.



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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.

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