A MESSAGE FROM THE CHAIR OF HPM

Welcome to Newsletter 95!

One of the fascinating aspects of leading an “academic life” is the diversity of individuals with whom I come into contact. Indeed, non-academics have this same experience, but I find that in meeting and engaging with so many different people that I am challenged to think differently about a range of issues – and I know that I grow because of it. And, this notion has been on my mind quite a bit lately, as I have been living and working in Germany – whose academic system is quite different from that in my small corner of the world in Tallahassee, Florida. Still, I would like to think that the experiences I have had and the students, colleagues, and new friends I have met this summer will inevitably help me to be a better scholar, colleague, and friend.

Why am I rambling on about this? While working at the University of Siegen, I have had the pleasure to teach a reading course on “History of Mathematics in Mathematics Education” – and during that course I feel like many of my HPM friends have been there in the course with me and my 15 students. We have read articles by Abraham Arcavi and his colleagues, Adriano Demattè, Michael N. Fried, Uffe Thomas Jankvist, David Pengelleny, and Man-Keung Siu. We have accessed excerpts and materials by Michael Glaubitz, Iris Gulikers and Klaske Blom, Tinne Hoff Kjeldsen and her colleagues, Peter Ransom, and Costas Tzanakis. Throughout the course, my students have impressed me with their struggle to learn about another aspect of their chosen profession: the potential for history of mathematics to inform their future teaching. Yet, it is also quite clear to me that I would not be able to share this dimension of mathematics education with
my students if it were not for the HPM community – of scholars and practitioners alike – and all that it affords in not just my scholarly work, but in my work with students.

It is my hope then, as you read about the numerous HPM-related activities taking place over the next year that are highlighted in this newsletter, that you consider ways in which you can add to our community. In particular, I bring to your attention the 8th European Summer University on History and Epistemology in Mathematics Education (ESU-8), which will take place in Oslo, Norway from 20 – 24 July 2018. One of the aims of the ESUs is “to give the opportunity to mathematics teachers, educators and researchers to share their teaching ideas and classroom experience related to this perspective.” I highlight this aim (of the three; see the announcement of ESU-8 in this newsletter) because it is again part of my psyche this summer: sharing teaching ideas, or at least the potential for a variety of ways in which history of mathematics might be used by classroom teachers, with my students this summer would not have been possible without my own participation in meetings / conferences such as the ESUs, and all that I have learned from them over the last decade. I encourage you to consider submitting a proposal for this important meeting, in which you can share your ideas (and, if appropriate, outcomes of research you have conducted on the implementation of those ideas in practice).

With regard to other HPM business, I hope to attend to several HPM Group matters in the coming months. (I am – as usual – woefully behind!) These include:

1. Contacting those of you who were involved in the research dossier work during Luis Radford’s term as Chair, to determine how we might move forward on that initiative for those who are interested.
2. Summarizing and communicating the Advisory Board members’ discussion of a proposal to create an HPM Journal (proposed by Evelyne Barbin and David Pengelley).
3. Creating an ad hoc committee of Advisory Board members interested in helping me to facilitate a “Practitioner’s Corner” feature of the HPM Newsletter (see NL 94 for an example).

Also, please join me in recognizing the inaugural members of the newly-established Honorary Advisory Board (HAdB):

Abraham Arcavi
Abdellah El Idrissi
Hans Niels Jahnke
Manfred Kronfellner
Chris Weeks

I thank these colleagues for their service to the HPM community, and for their time on the HPM Advisory Board!

In closing, I ask for your support and active participation in the activities of HPM. If you have questions, concerns, or suggestions, please let me know (kclark@fsu.edu).

Kathy Clark
HPM Chair
Florida State University
Tallahassee, Florida, USA
MAA Convergence: Mathematics History With Online Interactivity

MAA Convergence is both an online journal on the history of mathematics and its use in teaching and an ever-expanding collection of online resources to help its readers teach mathematics using its history. Founded in 2004 by well-known mathematics historians and educators Victor Katz and Frank Swetz, the Mathematical Association of America’s Convergence brings you a variety of interesting articles and teaching tools.

We highlight here some of our newest articles and resources for use in your classroom. Many of them use interactive features to help students understand and explore historical mathematical ideas.

In “Exploring Liu Hui’s Cube Puzzle: From Paper Folding to 3-D Design,” author Lingguo Bu offers history, classroom activities, and interactive applets to help you and your students explore Liu Hui’s 3rd century dissection of the cube into three pieces with volumes 1/2, 1/3, and 1/6 of the volume of the cube. The three puzzle pieces are shown above and below. The pieces in the image below were made using a 3-D printer.

For a different kind of puzzle, try “Mathematicians from A to Z,” a New York Times-style crossword puzzle created by mathematics instructor Sid Kolpas and a crossword puzzle creator Stu Ockman.

The article, “Misseri-Calendar: A Calendar Embedded in Icelandic Nature, Society, and Culture,” by Kristín Bjarnadóttir, reviews the calendar’s long history from Viking times to the present, and offers animations and ideas for your classroom.

In “A Translation of Evangelista Torricelli’s ‘The Quadrature of the Parabola, solved by many methods through the new geometry of indivisibles,’” authors Andrew Leahy and Kasandra Sullivan provide plenty of history and helpful diagrams along with their translation.
In “A Series of Mini-projects from TRansforming Instruction in Undergraduate Mathematics via Primary Historical Sources” the TRIUMPHS team introduces the first of a collection of mini-Primary Source Projects (mini-PSPs), “The Derivatives of the Sine and Cosine Functions” (by Dominic Klyve), a classroom assignment in which Calculus I students learn how Leonhard Euler (1707-1783) obtained these derivatives via differentials. Above, students work on a Primary Source Project under the supervision of Janet Barnett at a TRIUMPHS Site Tester Workshop in Denver, Colorado, in September of 2016.

In “Illustrating The Nine Chapters on the Mathematical Art: Their Use in a College Mathematics History Classroom,” author Joel Haack shares how he used his experiences on an MAA Mathematical Study Tour to China to enrich his teaching. The photo above is of a statue in the National Museum of China of a civil servant from the Sui Dynasty (581-618), an intended user of the Nine Chapters.

“Moses ibn Tibbon’s Hebrew Translation of al-Hassar's Kitab al Bayan,” by Jeremy I. Pfeffer (Hebrew University of Jerusalem) features the arithmetic of fractions as you’ve (possibly) never seen it before!

See fractions in the context of problem-solving using the method of double false position in the Arabic manuscript Kitab al-nuzah in “Mathematical Treasure: The Method of Scales in ibn al-Ha’im’s Book of Delights,” by Randy Schwartz and Frank Swetz. Above: This diagram is used in this and other manuscripts to illustrate and carry out the “method of scales.”
In “Mathematical Treasures at the Linda Hall Library,” author Cynthia Huffman highlights the mathematics collections available at this rare book library in Kansas City, Missouri. See images of mathematics books by Euclid, Pacioli, Cardano, Torricelli, Maria Agnesi, and Emilie du Chatelet.

Our “Index to Mathematical Treasures” includes hundreds of images for use in your classroom from dozens of libraries and sources.

See all of these articles and more at MAA Convergence: http://www.maa.org/press/periodicals/convergence

Join us at the Convergence of mathematics, history, and teaching!

Janet Beery
Editor, MAA Convergence
University of Redlands, California
USA
8th EUROPEAN SUMMER UNIVERSITY
ON HISTORY AND EPISTEMOLOGY IN
MATHEMATICS EDUCATION

20-24 July 2018
Oslo, Norway

ESU - 8
Oslo & Akershus University College of
Applied Sciences

https://esu8.edc.uoc.gr

ANNOUNCEMENT

Aim
The ESU mainly aims
- to provide a forum for presenting research in mathematics education and innovative teaching methods based on a historical, epistemological and cultural approach to mathematics and their teaching, with emphasis on actual implementation;
- to give the opportunity to mathematics teachers, educators and researchers to share their teaching ideas and classroom experience related to this perspective;
- in this way, to motivate further collaboration along these lines, among members of the mathematics education community in Europe and beyond.

The programme and activities of ESU-8 are structured around the following

Main themes:
*Theme 1*: Theoretical and/or conceptual frameworks for integrating history and epistemology of mathematics in mathematics education;
*Theme 2*: History and epistemology in students and teachers mathematics education: Curricula, courses, textbooks, and didactical material of all kinds - their design, implementation and evaluation;
*Theme 3*: Original historical sources in teaching and learning of and about mathematics;
*Theme 4*: Mathematics and its relation to science, technology, and the arts: Historical issues and socio-cultural aspects in relation to interdisciplinary teaching and learning;
*Theme 5*: Topics in the history of mathematics education;
*Theme 6*: History of mathematics in the Nordic countries.

More detailed information:
Visit the regularly updated website of ESU-8 [http://esu8.edc.uoc.gr](http://esu8.edc.uoc.gr)
See the First Announcement at [https://esu8.edc.uoc.gr/1st-announcement/](https://esu8.edc.uoc.gr/1st-announcement/)
&
Important dates:
- Submission of abstracts of proposals for all types of activities:
  1 September - 31 October 2017
- Authors’ notification of acceptance: 15 December 2017
- Launch of the Second Announcement: By 31 December 2017
- Deadline for early registration: 31 January 2018

Submission procedure: The submissions of proposals and full texts for the proceedings, the reviewing process, and authors’ notification will be realized online via https://esu8.edc.uoc.gr/submission and following the guidelines therewith.

Reviewing & Proceedings: Abstracts of proposals will be reviewed by the members of the Scientific Program Committee (SPC). Acceptance of a proposal means that the proposed activity will be included in the ESU-8 Scientific Programme. Full texts for inclusion to the ESU-8 Proceedings will be submitted after ESU-8 and will be further reviewed by members of the SPC at the usual international standards.

Reviewing procedure: Each proposal and full text will be reviewed by two independent referees. In case of conflicting reports, the paper will be adjudicated by a third referee. The final decision will be made by the chair and co-chairs of ESU-8, on the basis of all three reports. Any proposal or full text receiving two negative reports will not be accepted. All other proposals and full texts should be revised satisfactorily according to the referees’ suggestions and comments before they are finally accepted for inclusion in the ESU-8 scientific program.

For more detailed information on the review procedure, and the evaluation criteria, see https://esu8.edc.uoc.gr/submission/

Second Announcement: The Second Announcement will be launched by 31 December 2017 at the latest. It will include all necessary information on the registration fees, the ESU-8 timeline and its overall time schedule, information on the publication of its proceedings after ESU-8, information on the registration procedure, accommodation, the social program and other practical issues.

For further information, contact
Constantinos Tzanakis, Dep. of Education, Univ. of Crete, 74100 Rethymnon, Greece, esu8.tzanakis@edc.uoc.gr (chair)
Bjørn Smestad, Dep. of Primary and Secondary Teacher Education, Oslo & Akershus Univ. College of Applied Sciences, Oslo, Norway, esu8.smestad@edc.uoc.gr (chair of Local Organizing Committee)
Evelyne Barbin, IREM et LMJL, UFR des sciences et des techniques, Univ. de Nantes, 2 rue de la Houssinière, BP 92208, 44322 Nantes Cedex, France, evelyne.barbin@wanadoo.fr (co-chair)
Uffe Thomas Jankvist, Dep. of Education, Aarhus University, Campus Emdrup. Tuborgvej 164, DK-2400 Copenhagen NV, utj@dpu.dk (co-chair)
Tinne Hoff Kjeldsen, Dep. of Mathematical Sciences, University of Copenhagen, Universitetsparken 5, DK-2100 Copenhagen Ø, thk@math.ku.dk (co-chair)
Have you read these?


Blåsjö, V. (2017). On what has been called Leibniz’s rigorous foundation of infinitesimal geometry by means of Riemannian sums. Historia Mathematica, 44(2), 134-149.


Announcements of Events

Forthcoming BSHM Meeting
(The British Society for the History of Mathematics)

http://www.bshm.ac.uk/#forthcoming

Mathematical Constants and Their Beautiful Relationship

25 October 2017
Museum of London
Gresham Lecture

Professor John D Barrow
*Zero is a Hero.*

Professor Raymond Flood
*Just Imagine! The Tale of i.*

Professor Robin Wilson
*Pi and e, and ‘the most beautiful theorem in mathematics’.*

The Fourth International Conference on History and Pedagogy of Modern Mathematics

20-26 August 2017
Chengdu, China

The Second Circular (December 2016)

Organized by
School of Mathematics, Sichuan Normal University, Chengdu

In Association with
School of Mathematics, Northwest University, Xi’an
Dept of Mathematics, Simon Fraser University
Chinese Society for the History of Mathematics

Supported by
National Science Foundation of China

I. Organization

1. Scientific Committee
   Co-Chair
   Tom Archibald, Simon Fraser University, Vancouver
   Anjing Qu, Northwest University, Xian

2. Organizing Committee
   Co-Chair
   Du Wei, Sichuan Normal University, Chengdu
   JI Zhigang, Shaihai Jiaotong University, Shanghai
Members
Chen Chuanzhong, Hainan Normal University, Haikou
Cao Guangfu, Guangzhou University, Guangzhou
Chen Kesheng, Anhui Normal University, Wuhu
Deng Mingli, Hebei Normal University, Shijiazhuang
Guo Shirong, Inner Mongolia Normal University, Huhehaote
Huang Qinan, Shaanxi Normal University, Xi’an
Li Xiaoji, Northeastern University at Qinhuangdao, Qinhuangdao
Qiao Lei, Sichuan Normal University, Chengdu
Ren Xinxi, Shanxi Normal University, Linfen
Song Naiqing, Southwest University, Chongqing
Tang Quan, Xianyang Normal University, Xianyang
Wang Chang, Northwest University, Xi’an
Wang Guangming, Tianjin Normal University, Tianjin
Wang Qingjian, Liaoning Normal University, Dalian
Wang Xiaojin, East China Normal University, Shanghai
Xu Chuansheng, Linyi University, Linyi
Xue Youcai, Zhejiang University of Science and Technology, Hangzhou
Xu Zelin, Donghua University, Shanghai
Yuan Min, Northwest University, Xi’an
Zhou Ji, Sichuan Normal University, Chengdu
Zhang Hong, Sichuan Normal University, Chengdu

Secretary
Zhang Hong (Chair), Qiao Lei, Wang Chang

II. Program
Five days of scientific sessions are planned.

1. Invited Lecturers
- Tom ARCHIBALD, Simon Fraser University, Vancouver
- Umberto BOTTAZZINI, University of Milan, Milan
- Jiang-Ping Jeff CHEN, St. Cloud State University, St. Cloud
- Leo CORRY, Tel Aviv University, Tel Aviv
- Catherine GOLDSTEIN, CNRS, Paris
- Christopher David HOLLINGS, University of Oxford, Oxford
- Sung Sa HONG, Sogang University, Seoul
- Lizhen JI, University of Michigan, Ann Arbor
- Zhigang JI, Shanghai Jiaotong University, Shanghai.
- Fumiharu KATO, Tokyo Institute of Technology, Tokyo
- Deborah KENT, Drake University, Des Moines
- Young Wook KIM, Korea University, Seoul
- Tinne Hoff KJELDSEN, Roskilde University, Copenhagen
- Ko Wei LIH, Academia Sinica, Taipei
- Jesper LÜTZEN, University of Copenhagen, Copenhagen
- Jeanne PEIFFER, CNRS, Paris
- Anjing QU, Northwest University, Xian
- Sangwook REE, The University of Suwon, HwaSeongSi
- Tilman SAUER, Johannes Gutenberg University Mainz, Mainz
2. Scientific Sessions for Contributed Papers
Plenary lecture and Panel session will be organized on specific topics.

3. Language: English, Chinese

4. Tentative Schedule

<table>
<thead>
<tr>
<th>Language</th>
<th>8:00 – 12:00</th>
<th>14:00 – 18:00</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Plenary lecture</td>
<td>Plenary lecture</td>
</tr>
<tr>
<td>22</td>
<td>Plenary lecture</td>
<td>Plenary lecture</td>
</tr>
<tr>
<td>23</td>
<td>Plenary lecture</td>
<td>Plenary lecture</td>
</tr>
<tr>
<td>24</td>
<td>Special session for young scholars</td>
<td>Sightseeing</td>
</tr>
<tr>
<td>25</td>
<td>Culture and local history of mathematics</td>
<td>History and pedagogy of college mathematics</td>
</tr>
</tbody>
</table>

5. Topic
Contemporary Research in the History of Modern Mathematics and Applications to Pedagogy

Research in both the history of mathematics and the applications of history of mathematics to pedagogy have been enriched by new directions in recent years. The results have included new emphases in both disciplines, with diverse and far-reaching consequences. On the side of history, we see a renewed interest in the philosophical issues of various kinds, on the transmission of mathematical knowledge from local settings to global norms, on networks of scholars and networks of texts, on the nature and importance of application in mathematics, and on a reassessment of the importance of computation in all its forms. On the side of education, we see an expansion of the strategic use of history as a tool, going beyond cross-cultural comparison to being an ingredient in various theoretical approaches.

The purpose of the meeting proposed is to assemble senior scholars active in these fields, junior scholars whose work promises to be transformative, and scholars who are ambitious to acquire new approaches while presenting contributed papers on work of their own for comment by their peers.

With a broadly inclusive scope we hope to build on the positive experiences of earlier meeting to continue to build a Chinese and international research community and to build links for the future.

We are deeply convinced that the better understanding of modern mathematical activity that such an approach can yield will be helpful for mathematics education at all levels, and that the presence of researchers with education as a primary focus will enhance this aim.
III. Practicalities

1. Registration

Registration Fees (Registration covers the book of abstracts, all the conference sessions, including the banquet and all meals. It does not cover accommodation.)

<table>
<thead>
<tr>
<th>Participators</th>
<th>Students</th>
<th>Accompanying</th>
</tr>
</thead>
<tbody>
<tr>
<td>USD$200</td>
<td>USD$100</td>
<td>USD$150</td>
</tr>
</tbody>
</table>

Registration fee is paid upon arrival. We normally expect that participants will arrive on August 20 and depart on August 26.

2. Accommodation


3. Deadline of Registration form, Title and Abstract [Editors’ Note: All of these deadlines are now passed.]

- Please send back your registration form before 1 May 2017.
- Please send title of your talk before 1 June 2017.
- We expect that you send the abstract of your paper before 1 July 2017.
- All emails should be sent to Dr. Qiao Lei: qiaolei5@yeah.net.
  - We accept *.doc and *.txt files.

4. Webpage and Contact persons

- Official webpage will be announced.
- Dr. Qiao Lei, Sichuan Normal University, qiaolei5@yeah.net
- Dr. Wang Chang, Northwest University, heart_cw@126.com

ICHME-5

**Fifth International Conference on the History of Mathematics Education**

19-22 September 2017
Utrecht, the Netherlands

ICHME-5 Announcement

We are calling for papers for this fifth conference, as a continuation of the successful work of the first four conferences, in Iceland (2009), Portugal (2011), Sweden (2013) and Italy (2015).

Submission of abstracts, and later of papers, is only possible via the conference website: www.ichme-5.nl. Abstracts should be in English and about one page (500 words). References must be included. Please briefly describe (one or two sentences) why your proposed presentation is a relevant addition to the body of knowledge of the History of Mathematics Education. Once submitted, there will be no possibility for a revision of abstracts.

The conference
First becoming visible internationally at ICME 10 in 2004 (in Copenhagen) as Topic Study Group 29, the history of mathematics education has since become a well-established area of research. It has been a subject of interest in various international meetings, e.g., ICME, HPM, CERME and ESU conferences.
The first specialized research conference, entitled “Ongoing Research in the History of Mathematics Education,” held in Garðabær near Reykjavík (Iceland) in 2009, led to a series of such specialized conferences. This will be the fifth international conference, this time held in Utrecht, the Netherlands.

During previous conferences themes discussed included:
– The Development of Mathematics Education in Specific Countries;
– Practices of Teaching, Mathematics Textbooks, Teacher Education, Transmission and Reception of Ideas;
– Geometry Teaching;
– Algebra Teaching;
– Teaching of Calculus;
– Interdisciplinarity and Contexts;
– The Modern Mathematics Movements; and
– History of Curricula.

Those proposing abstracts will have wide freedom of choice, but in order to stimulate research in areas that are less explored, new topics such as teacher journals and mathematics education prior to 1800 are suggested. A publication of the proceedings is planned. Papers will be peer-reviewed.

The conference is organized by the Dutch Association of Mathematics Teachers, in cooperation with the Freudenthal Institute and the Descartes Centre of the University of Utrecht.

International program committee:
• Kristín Bjarnadóttir (Iceland)
• Jan Hogendijk (the Netherlands)
• Jenneke Krüger (the Netherlands)
• Johan Prytz (Sweden)
• Gert Schubring (Brazil/Germany)
• Bert Theunissen (the Netherlands)

Advisor: Fulvia Furinghetti (Italy)

Further information about the conference and practical information is available on the conference website: www.ichme-5.nl.

Registration and conference fee: until 15 June 2017, the fee is € 195; thereafter the fee will be € 230. Last day of registration and payment is 31 August 2017. Registration will take place via the conference website.

References


Jenneke Krüger
Freudenthal Institute
University of Utrecht
The Netherlands

The Fourth International Meeting of the Association for the Philosophy of Mathematical Practice

23-27 October 2017
Salvador da Bahia, Brazil

http://www.philmathpractice.org

The Fourth International Meeting of the Association for the Philosophy of Mathematical Practice will be held on October 23-27, 2017, in Salvador da Bahia, Brazil.

Registration: All contributing speakers and discussants are requested to confirm their participation before May 30th by sending an e-mail containing name and affiliation and paying a conference fee of US$ 100, which will include congress material, coffee breaks and the conference dinner meal. Participants without a permanent position are entitled to a discount, paying a fee of US$ 50; similarly for those who may attend the conference without presenting a communication. This should be settled in advance via transfer (more details to be defined).

Keynote speakers
Luiz Carlos Pereira – Brazil
Jemma Lorenat – USA
Valeria Giardino – France
José Ferreirós – Spain
Erich Reck – USA
Round Tables
Platonism in Mathematical Practice
Elaine Landry (USA)
Oswaldo Chateaubriand (Brazil)
Marco Panza (France)

Formal and Informal Proofs
Jessica Carter (Denmark)
Paolo Mancosu (USA)
Max Dickmann (France)

Workshops
On the Relationship between Geometry and Arithmetic: The Theories of Proportion from Euclid to Hilbert
Organizer: Davide Crippa (Czech Republic)
Speakers: Vincenzo De Risi (Germany)
Davide Crippa (Czech Republic)
Eduardo Giovannini (Argentina)

Varieties of Visualization in Mathematics
Organizer: Silvia De Toffoli (USA)
Speakers: Silvia De Toffoli (USA)
Javier Legris (Argentina)
Danielle Macbeth (USA)

Education and Mathematical Practice
Organizer: Gert Schubring (Brazil)
Speakers: Gert Schubring (Brazil)
Tinne Hoff Kjeldsen (Denmark)
Nicola Oswald (Germany)

Contradictory Objects in Mathematical Practice
Organizer: Walter Carnielli (Brazil)
Speakers: Walter Carnielli (Brazil)
Giorgio Venturi (Brazil)
Abilio Rodriguez (Brazil)

The 13th Maghrebian Colloquium on the History of Arabic Mathematics
30 March – 1 April 2018
Tunis, Tunisia

Second announcement
The 13th Colloquium on the History of Arabic Mathematics (COMHISMA 13) shall take place on Friday 30th March, Saturday 31st March and April 1st, 2018 in Tunis City (CIFFIP - Lac II).

Themes of the Colloquium:
A. Theoretical mathematics, Astronomy, Applied mathematics, Recreational mathematics in Arabic and Islamic traditions.
B. History of teaching Arabic mathematics and its circulation.
C. Mathematics and Society.

Languages of the meeting: Abstracts, papers and communications can be presented in the Arabic, English, or French languages.

Important deadlines
- Deadline for abstract submission
15 September 2017
- Deadline for acceptation of papers
15 November 2017
- Deadline for receiving full text of communication
15 February 2018
- Deadline for registration
15 January 2018
**Registration Fees**
Professor: 120 DT (± 50 Euros)
Student: 50 DT (± 25 Euros)

**Accommodations**
All activities planned for COMHISMA 13 will be held at CIFFIP – Lac II.
Participants can use some lodging facilities on the premises or they can also lodge at one of the Hotels in the center of Tunis.
Accommodation fees at the CIFFIP: 180 DT (± 75 Euros) for three days.
For center city hotels, 73 DT to 200 DT for each night, with breakfast.
- Arrival of the participants
  29 March 2018, after noon.
- Departure of the participants
  01 April 2018, after noon.

**Cultural activities and tourist tour**
No work is planned for Saturday after noon, 31 March 31 2018. We shall offer several activities from which participants may choose.

The International scientific committee of COMHISMA 13 is chaired by Professor Ahmed Djebbar.

**Institutional Partners**
- Centre International de Formation des Formateurs et de l’Innovation Pédagogique (CIFFIP)
- Institut Supérieur de l’Education et de la Formation Continue (ISEFC)
- Laboratoire du Monde Arabo-Islamique Médiéval (LMAIM)

**Organizing Associations**
- Association des Femmes Tunisiennes Mathématiciennes
- Association Tunisienne des Sciences Mathématiques
- Association Tunisienne de Didactique des Mathématiques
- The Mediterranean Institute for the Mathematical Sciences (MIMS-Tunisia).
- Société Mathématique de Tunisie

**Local Organizing Committee**
Honorary Chairman: Béchir Kachoukh
Members:
- Mahdi Abdeljaouad - Faouzi Chaabane - Marouane Ben Miled - Hmida Hedfi
- Taoufik Charrada et Salma Elaoud (ATSM)
- Mounir Dhib et Rahim Kouki (ATDM)
- Makkia Dammak (AFTM)
- Salwa Aouadi (MIMS)
- Nedra Belhaj Rhouma (SMT)

Contact: mahdi.abdeljaouad@gmail.com
## HPM Administrative Structure

### Chair:

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clark, Kathy</td>
<td>Florida State University, Tallahassee, Florida, USA</td>
</tr>
</tbody>
</table>

### Former Chair (2012-2016):

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Radford, Luis</td>
<td>École des sciences de l'éducation, Université Laurentienne, Sudbury, Ontario, Canada</td>
</tr>
</tbody>
</table>

### Executive Committee:

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barbin, Evelyne</td>
<td>Universite de Nantes, IREM-Centre Francois Viete, France</td>
</tr>
<tr>
<td>Furinghetti, Fulvia</td>
<td>Dipartimento di Matematica dell'Università di Genova, Genova, Italy</td>
</tr>
<tr>
<td>Jankvist, Uffe Thomas</td>
<td>Aarhus University, Department of Education, Denmark</td>
</tr>
<tr>
<td>Kjeldsen, Tinne Hoff</td>
<td>Department of Mathematical Sciences, University of Copenhagen, Denmark</td>
</tr>
<tr>
<td>Tzanakis, Constantinos</td>
<td>Department of Education, University of Crete, Rethymnon 74100, Greece</td>
</tr>
</tbody>
</table>

### Advisory Board:

<table>
<thead>
<tr>
<th>Name</th>
<th>Institution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bjarnadóttir, Kristín</td>
<td>University of Iceland, School of Education, Reykjavík, Iceland</td>
</tr>
<tr>
<td>Booker, George</td>
<td>Griffith University, Brisbane, Australia</td>
</tr>
<tr>
<td>Chorlay, Renaud</td>
<td>IREM, Université Paris 7, Paris, France</td>
</tr>
<tr>
<td>D'Ambrosio, Ubiratan</td>
<td>Pontificia Universidade, Catolica de Sao Paulo, Brazil</td>
</tr>
<tr>
<td>Fasanelli, Florence</td>
<td>American Association for the Advancement of Science, Washington, DC, USA</td>
</tr>
<tr>
<td>FitzSimons, Gail</td>
<td>Warrandyte, Victoria, Australia</td>
</tr>
<tr>
<td>Fried, Michael N.</td>
<td>Program for Science and Technology Education, Ben-Gurion University of the Negev, Israel</td>
</tr>
<tr>
<td>Horng, Wann-Sheng</td>
<td>Department of Mathematics, National Taiwan Normal University, Taiwan</td>
</tr>
<tr>
<td>Hwang, Sunwook</td>
<td>Department of Mathematics, Soongsil University, Seoul, Korea</td>
</tr>
<tr>
<td>Isoda, Masami</td>
<td>Graduate School of Comprehensive Human Science, University of Tsukuba, Japan</td>
</tr>
<tr>
<td>Katz, Victor</td>
<td>University of the District of Columbia, Washington, DC, USA</td>
</tr>
<tr>
<td>Lakoma, Ewa</td>
<td>Institute of Mathematics Military University of Technology Warsaw, Poland</td>
</tr>
<tr>
<td>Lawrence, Snezana</td>
<td>Anglia Ruskin University, Cambridge, England, UK</td>
</tr>
<tr>
<td>Massa-Esteve, Maria Rosa</td>
<td>Centre de Recerca per a la Història de la Tècnica, Matemàtica Aplicada I, ETSEIB, Universitat Politècnica de Catalunya, Barcelona, Spain</td>
</tr>
<tr>
<td>Pengelley, David</td>
<td>Department of Mathematical Sciences, New Mexico State University, Las Cruces, USA</td>
</tr>
<tr>
<td>Pinto, Hélder</td>
<td>CIDMA, University of Aveiro, Aveiro, Portugal</td>
</tr>
<tr>
<td>Puig, Luis</td>
<td>Departamento de Didáctica de las Matemáticas, Universitat de València Estudi General, Spain</td>
</tr>
<tr>
<td>Rogers, Leo</td>
<td>Independent Researcher, Oxford, UK</td>
</tr>
<tr>
<td>Qu, Anjing</td>
<td>Department of Mathematics at Northwest University, Xian, China</td>
</tr>
<tr>
<td>Schubring, Gert</td>
<td>IDM, Universitat Bielefeld,Bielefeld, Germany</td>
</tr>
<tr>
<td>Siu, Man-Keung</td>
<td>Department of Mathematics, University of Hong Kong, Hong Kong SAR, China</td>
</tr>
<tr>
<td>Smestad, Bjørn</td>
<td>Faculty of Education, Oslo University College, Norway</td>
</tr>
<tr>
<td>Stein, Robert</td>
<td>California State University, San Bernardino, USA</td>
</tr>
<tr>
<td>Winicki-Landman, Greisy</td>
<td>Department of Mathematics and Statistics, California State Polytechnic University, USA</td>
</tr>
</tbody>
</table>

HPM Newsletter No. 95 July 2017

HPM Newsletter webpage: [http://grouphpm.wordpress.com/](http://grouphpm.wordpress.com/)
Newsletter Editors:

Clark, Kathy  
Florida State University, Tallahassee, Florida, USA

Lawrence, Snezana  
Anglia Ruskin University, Cambridge, England, UK

Pinto, Helder  
CIDMA – University of Aveiro, Aveiro, Portugal

Puig, Luis  
Departamento de Didáctica de las Matemáticas, Universitat de València Estudi General, Spain

Newsletter Distributors:

If you wish to be a distributor in a new or unstaffed area please contact the editors.

<table>
<thead>
<tr>
<th>Area</th>
<th>Name and address</th>
<th>Email address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>Juan E. Nápoles Valdés, Lamadrid 549, (3400) Corrientes, ARGENTINA</td>
<td><a href="mailto:napoles4369@gmail.com">napoles4369@gmail.com</a></td>
</tr>
<tr>
<td>Australia</td>
<td>Gail FitzSimons, 68 Bradleys Lane, Warrandyte, Victoria 3113, AUSTRALIA</td>
<td><a href="mailto:gfi@unimelb.edu.au">gfi@unimelb.edu.au</a></td>
</tr>
<tr>
<td>Austria</td>
<td>Manfred Kronfellner, Institute of Discrete Mathematics and Geometry, Vienna University of Technology, Wiedner Haupstr. 8-10, A-1040 Wien, AUSTRIA</td>
<td><a href="mailto:m.kronfellner@tuwien.ac.at">m.kronfellner@tuwien.ac.at</a></td>
</tr>
<tr>
<td>Belgium and The Netherlands</td>
<td>Steven Wepster, Mathematical Institute, Utrecht University, Budapeststraat 6, P.O. Box 80010, 3508 TA Utrecht, NL</td>
<td><a href="mailto:S.A.Wepster@uu.nl">S.A.Wepster@uu.nl</a></td>
</tr>
<tr>
<td>Canada</td>
<td>Thomas Archibald, Mathematics Department, Acadia University, Wolfsville, NS B0P1X0, CANADA</td>
<td><a href="mailto:Tom.Archibald@acadiau.ca">Tom.Archibald@acadiau.ca</a></td>
</tr>
<tr>
<td>China</td>
<td>Ma Li, Linkoping University, ITN, SE - 601 74 Norrkoping, SWEDEN</td>
<td><a href="mailto:ma_li@mac.com">ma_li@mac.com</a></td>
</tr>
<tr>
<td>Colombia</td>
<td>Edgar Alberto Guanaceme, Facultad de ciencia y tecnologías, Universidad Pedagógica Nacional – Bogotá, COLOMBIA</td>
<td><a href="mailto:guanaceme@pedagogica.edu.co">guanaceme@pedagogica.edu.co</a></td>
</tr>
<tr>
<td>Denmark</td>
<td>Tinne Hoff Kjeldsen, Department of Mathematical Sciences, University of Copenhagen. Universiteitsparken 5, 2100 Copenhagen Ø, DENMARK</td>
<td><a href="mailto:thk@math.ku.dk">thk@math.ku.dk</a></td>
</tr>
<tr>
<td>France</td>
<td>Evelyne Barbin, Centre François Viète, Faculté des sciences et des techniques, 2 Chemin de la Houssinière, BP 92208, 44322 Nantes cedex, FRANCE</td>
<td><a href="mailto:evelyne.barbin@wanadoo.fr">evelyne.barbin@wanadoo.fr</a></td>
</tr>
<tr>
<td>Germany</td>
<td>Gert Schubring, Inst. f. Didaktik der Math., Universitaet Bielefeld, Postfach 100 131, D-33501, Bielefeld, GERMANY</td>
<td><a href="mailto:gert.schubring@uni-bielefeld.de">gert.schubring@uni-bielefeld.de</a></td>
</tr>
<tr>
<td>Hungary</td>
<td>Kati Munkácsy, Eötvös Loránd University, Centre of Mathematics Education, Budapest, street Fazmány 1/c, HUNGARY</td>
<td><a href="mailto:katalin.munkacsy@gmail.com">katalin.munkacsy@gmail.com</a></td>
</tr>
<tr>
<td>Iceland</td>
<td>Kristín Bjarnadóttir, University of Iceland, School of Education. v. Stakahlöfd 105 Reykjavik, Iceland</td>
<td><a href="mailto:kristbj@hi.is">kristbj@hi.is</a></td>
</tr>
<tr>
<td>Iran</td>
<td>Mohammad Bagheri, P.O.Box 13145-1785, Tehran, IRAN</td>
<td><a href="mailto:sut5@sina.sharif.edu">sut5@sina.sharif.edu</a></td>
</tr>
<tr>
<td>Israel</td>
<td>Ted Eisenberg, Mathematics Department, Ben Gurion University of the Negev, Beer-Sheva 84105, ISRAEL</td>
<td><a href="mailto:eisen@math.bgu.ac.il">eisen@math.bgu.ac.il</a></td>
</tr>
<tr>
<td>Italy</td>
<td>Marta Menghini, Dipartimento di Matematica (Universita` La Sapienza), Piazzale A. Moro 5, 00185 Roma ITALY</td>
<td><a href="mailto:marta.menghini@uniroma1.it">marta.menghini@uniroma1.it</a></td>
</tr>
<tr>
<td>Japan</td>
<td>Osamu Kota, 3-8-3 Kajiwara, Kamakura Kanagawa-ken, 247-0063 JAPAN</td>
<td><a href="mailto:kota@asa.email.ne.jp">kota@asa.email.ne.jp</a></td>
</tr>
<tr>
<td>Malaysia</td>
<td>Mohamed Mohini, Department of Science and Mathematical Education, Universiti Teknologi Malaysia, 81310 Johor, MALAYSIA</td>
<td><a href="mailto:mohini@fp.utm.my">mohini@fp.utm.my</a></td>
</tr>
<tr>
<td>Mexico</td>
<td>Alejandro R. GarcíaDiego, Caravaggio 24, Col. Nonoalco Mixcoac Del. Benito Juárez 03700 México, D. F. México</td>
<td><a href="mailto:gardan@servidor.unam.mx">gardan@servidor.unam.mx</a></td>
</tr>
<tr>
<td>Morocco</td>
<td>Abdellah El Idrissi, E.N.S. B.P. 2400 Marrakech, 40 000, MOROCCO</td>
<td><a href="mailto:a_elidrissi@hotmail.com">a_elidrissi@hotmail.com</a></td>
</tr>
<tr>
<td>New Zealand</td>
<td>Brenda Bicknell, Faculty of Education, University of Waikato, Private Bag 3105, Hamilton 3240, NEW ZEALAND</td>
<td><a href="mailto:bicknell@waikato.ac.nz">bicknell@waikato.ac.nz</a></td>
</tr>
</tbody>
</table>

HPM Newsletter No. 95 July 2017  
HPM Newsletter webpage: [http://grouphpm.wordpress.com/](http://grouphpm.wordpress.com/)
<table>
<thead>
<tr>
<th>Area</th>
<th>Name and address</th>
<th>Email address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other East Asia</td>
<td>Gloria Benigno, Department of Education, Culture and Sports, Region X, Division of Misamis Occidental, Oroquieta City, PHILLIPINES</td>
<td><a href="mailto:glorya4444@yahoo.com">glorya4444@yahoo.com</a></td>
</tr>
<tr>
<td>Peru</td>
<td>María del Carmen Bonilla, Calle Reni 272, San Borja, Lima 41, Lima, PERU.</td>
<td><a href="mailto:me_bonilla@hotmail.com">me_bonilla@hotmail.com</a></td>
</tr>
<tr>
<td>Poland</td>
<td>Ewa Lakoma, Institute of Mathematics Military University of Technology Warsaw, POLAND</td>
<td><a href="mailto:ewa.lakoma@wat.edu.pl">ewa.lakoma@wat.edu.pl</a></td>
</tr>
<tr>
<td>Russia</td>
<td>Vasili Mikhailovich Busev</td>
<td><a href="mailto:vbusev@yandex.ru">vbusev@yandex.ru</a></td>
</tr>
<tr>
<td>Scandinavia</td>
<td>Sten Kaijser, Department of Mathematics, P.O. Box 480, SE- 751 06 Uppsala, SWEDEN</td>
<td><a href="mailto:sten@math.uu.se">sten@math.uu.se</a></td>
</tr>
<tr>
<td>South America</td>
<td>Marcos Vieira Teixeira, Departamento de Matemática, IGCE – UNESP, Postal 178, 13 500 – 230 Rio Claro, SP BRAZIL.</td>
<td><a href="mailto:marti@rc.unesp.br">marti@rc.unesp.br</a></td>
</tr>
<tr>
<td>South Asia</td>
<td>Prof. R. C. Gupta, Ganita Bharati Academy, R-20, Ras Bahar Colony, Jhansi-284003, U.P, INDIA</td>
<td></td>
</tr>
<tr>
<td>South East Europe</td>
<td>Nikos Kastanis, Department of Mathematics, Aristotle University of Thessaloniki, Thessaloniki 54006, GREECE</td>
<td><a href="mailto:nioka@auth.gr">nioka@auth.gr</a></td>
</tr>
<tr>
<td>Southern Africa</td>
<td>Marcos Cherinda, Universidade Pedagogica, Campus de Lhanguene, Faculdade de Ciencias Naturais e Matematica, CP 4040, Maputo, MOZAMBIQUE</td>
<td><a href="mailto:mCherinda@up.ac.mz">mCherinda@up.ac.mz</a></td>
</tr>
<tr>
<td>Spain and Portugal</td>
<td>Carlos Correia de Sá, Dep. Matematica Pura; Faculdade de Ciencias da U. do Porto; Rua do Campo Alegre, 687 P - 4169 - 007 Porto, PORTUGAL</td>
<td><a href="mailto:csa@fc.up.pt">csa@fc.up.pt</a></td>
</tr>
<tr>
<td>Taiwan</td>
<td>Wann-sheng Horng, Math Dept NTNU, 88 Sec.4, Tingchou Rd., Taipei, TAIWAN</td>
<td><a href="mailto:horng@math.ntnu.edu.tw">horng@math.ntnu.edu.tw</a></td>
</tr>
<tr>
<td>Turkey</td>
<td>- currently vacant -</td>
<td></td>
</tr>
<tr>
<td>United Kingdom</td>
<td>Snezana Lawrence, Anglia Ruskin University, Cambridge, England, UK</td>
<td><a href="mailto:snezana@mathisgoodforyou.com">snezana@mathisgoodforyou.com</a></td>
</tr>
<tr>
<td>United States of America</td>
<td>David L. Roberts, Prince George’s Community College, Largo, Maryland, USA</td>
<td><a href="mailto:robertsdll@aol.com">robertsdll@aol.com</a></td>
</tr>
</tbody>
</table>
Table of contents

<table>
<thead>
<tr>
<th>Item</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Message from HPM Chair</td>
<td>1</td>
</tr>
<tr>
<td>MAA Convergence</td>
<td>3</td>
</tr>
<tr>
<td>ESU 8</td>
<td>6</td>
</tr>
<tr>
<td>Have you read these?</td>
<td>8</td>
</tr>
<tr>
<td>Announcements of events</td>
<td>10</td>
</tr>
<tr>
<td>HPM Administrative Structure</td>
<td>18</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>No.</th>
<th>Deadline for material</th>
<th>Sent to distributors</th>
</tr>
</thead>
<tbody>
<tr>
<td>96</td>
<td>12 October 2017</td>
<td>November 2017</td>
</tr>
<tr>
<td>97</td>
<td>12 February 2018</td>
<td>March 2018</td>
</tr>
<tr>
<td>98</td>
<td>12 June 2018</td>
<td>July 2018</td>
</tr>
</tbody>
</table>

The Newsletter is the communication of the International Study Group on the Relations between the History and Pedagogy of Mathematics, an affiliate of the International Commission on Mathematical Instruction.
The Newsletter is free of charge, available upon request from the distributor for your area, and may be reproduced with acknowledgement.

Editors:
Snezana Lawrence, snezana@mathsisgoodforyou.com
Helder Pinto, hbmpinto1981@gmail.com
Kathy Clark, kclark@fsu.edu
Luis Puig, luis.puig@uv.es

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.