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

No. 93 **November 2016**

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 THE NEW CHAIR OF HPM

Dear colleagues and friends of HPM,

Greetings and welcome to Newsletter 93 of the HPM Group! I have assisted with the Newsletter for several years now, but this is the first time I need to address the whole group in an explicit way – so I ask for your forgiveness for my first attempt at a communication of this type.

First, I would like to thank Luis Radford for his service to the HPM community, as chair of the HPM Group for the last four years. I also wish to thank the members of the Advisory Board, the members of the Executive Committee, the Newsletter editors and distributors (especially to Helder Pinto for formatting contributions from all over the world into such an inviting format), and the friends and colleagues of the community for all the work, interactions, and contributions made over the last four years. Being a participant in this community (for just about 12 years now) has been one of the most professionally satisfying aspects of my career, and I am grateful to be a part of it.

Since I am late in getting this message to Helder so that the November 2016 newsletter can be distributed, I will not introduce myself at great length. Here is a

short summary of who I have been as a mathematics educator (broadly) and one who is interested in how history and pedagogy of mathematics belongs in mathematics education.

Many of you know me in my post-Ph.D. life; however, I lived another life in mathematics education before I became an active member in the HPM Group. I taught high school mathematics from 1987 to 2001 and in 2001 I was awarded an Albert Einstein Distinguished Educator Fellowship, and as part of that fellowship, I served on Capitol Hill in Washington, DC, advising legislators in matters of educational policy. During that one-year fellowship, I realized that I knew very little about the education profession, and I decided that I should pursue a Ph.D. in Mathematics Education to rectify that. However, just before leaving the classroom, I became involved with The Institute for the History of Mathematics and its use in Teaching, and through that work – as a high school mathematics teacher field testing modules from what would become the Historical Modules (Katz & Michalowicz, 2004) – I met Victor Katz and the first stone in my path to a Ph.D., as well as my future academic career, was set.

I completed my Ph.D. in Curriculum and Instruction (Mathematics Education specialization) at the University of Maryland College Park, and Victor Katz continued to be a strong influence in my work there (including serving on my dissertation committee). Victor was also the first to bring such conferences as ICME and the HPM satellite meeting to my attention. I attended my first ICME meeting in 2004 (ICME 10, Copenhagen) but due to lack of funding, I was unable to attend HPM that year. Since 2004, however, I have attended two ICMEs, three HPMs, three ESUs, and three CERMEs.

I moved to Tallahassee, Florida in 2006 and because of the pre-service teacher education program that was in place at FSU when I first began, I was able to engage in work that I am still very much interested in: investigating (problematizing?) the role that history of mathematics plays in teachers' mathematical knowledge for teaching.

My work at FSU has changed quite a bit in the last 10 years, and as a result, I have needed to diversify and expand my interests about the role of history of mathematics in mathematics teaching and learning. I am excited to be involved with two efforts – both since 2015. In the first, I have been working with colleagues from the University of Siegen (Ingo Witze, Gero Stoffels) and the University of Cologne (Horst Struve) on a project in which a seminar based on the historical development of a particular branch of mathematics (geometry, in one case) is used to address the transition problem faced by university students preparing to teach mathematics (the transition from school to university mathematics, in particular). In the second effort, a team of mathematicians is developing and testing primary source projects (PSPs) for use in undergraduate mathematics classrooms. One goal of the project (TRIUMPHS: Transforming Instruction in Undergraduate Mathematics via Primary Historical Sources;

http://webpages.ursinus.edu/nscoville/TRIUMPHS.html) is to conduct research on the implementation of the PSPs, and the five-year project promises to contribute a variety of outcomes, perspectives, and classroom materials.

Of course, without a community like the HPM Group, many of us would not know the potential for such work and collaboration around the world. HPM 2016 and ICME13 provided two venues in which to meet and engage others interested in the various HPM domains. Taken from the HPM Group's website (http://www.clab.edc.uoc.gr/hpm/about%20HPM.htm): The HPM Group seeks to [combine] the history of mathematics with the teaching and learning of mathematics, …[and] HPM is the link between the past and the future of mathematics. Therefore, the group aims at stressing the conception of mathematics as a living science, a science with a long history, a vivid present and an as yet unforeseen future.

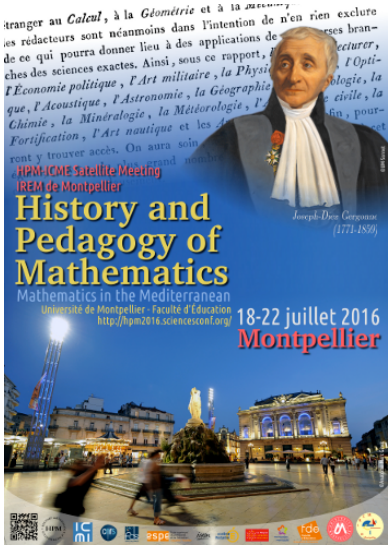
This is the work we engage in – along many paths and from many perspectives. It was so lovely to interact with colleagues with whom I share a "kindred spirit" in both academic work and personal interests, and to meet new friends and colleagues. I hope to see at future HPM meetings and conferences. If HPM 2016 or ICME 13 were the first for you: welcome to the HPM community. If you were motivated and enthused by the people, places, and work that you met there, I sincerely hope that you will consider joining us at the European Summer University 8 (ESU8) in Oslo, Norway in 2018. Or, perhaps you have a paper or poster you will present at CERME10 in Dublin, Ireland in February 2017; if so, I look forward to seeing you there. Or, perhaps you are interested in the several meetings that will take place in other parts of the world (see this newsletter for details of such meetings and events). In any and all of these cases, I hope that you will contribute just as much as you take away: this is certainly the group for which this is highly possible.

In the next Newsletter, I will revisit initiatives that have carried over from Luis' Chairship, including revisiting the "research dossiers." Additionally, I will be working with the existing Advisory Board to establish the Executive Committee for this term (2016-2020). In the meantime, please contact me if you have questions, concerns, ideas, etc. – and I will try to address them to the best of my ability (and if I am unable, then the Executive Committee and Advisory Board can certainly assist me in doing so). Finally, I thank the Newsletter distributors for their work in disseminating the Newsletters to interested folks around the globe. We may be in need of folks to help us in this work, so please stay tuned for invitations in this regard!

Kathy Clark
HPM Chair
Florida State University, USA

Reflection about HPM 2016 in Montpellier

By Sebastian Schorcht



In the following, I offer my reflection about the HPM Satellite Meeting of ICME-13, which took place in Montpellier from 18 – 22 July 2016, as if it was an interview between my "past" self and the post-conference me. The past of myself is the Interviewer and the post-conference self will answer the questions.

Interviewer: Dear future-self, nice to meet you. I'm happy you have found a few minutes to answer my questions. I have many questions about the conference you attended. For example, what is your impression of the HPM Community?

Post-conference self: *Overwhelming*, *familiar*, *scientifically-sound,* and *interested in cultural activity*. The spirit in the community was overwhelming, upon first meeting each other. However, things seemed very familiar to me, when everyone discussed about the research experience. The researchers in HPM are willing to help each other in their work. They enrich their research work by comments from others. Besides this overwhelming and familiar spirit, some presentations impressed me with their carefully extracted hypotheses and logical organization, e.g., the presentation by Katz or by Fried, Jahnke, & Guillemette, or by Chorlay. Specifically, I will remember the dramatic presentation, a cultural experience about complex numbers written by Hitchcock, which provided us with a very nice afternoon.

Interviewer: It sounds to me like a fruitful conference in Montpellier. What were your scientific take-home message and/or social outcome about this conference?

Post-conference self: Perhaps there will be many scientific influences on my work. I can't account for all of them right now, but I could make a presumption for you, my past myself:
I think there were many interesting ideas. For example, from Ewa Lakoma: she spoke about the concept of mathematical cognitive transgression (MCT) by Semadeni (2015).
The use of this concept to understand epistemological obstacles as forgotten transitions from a process to an objective view on mathematics expressions is a nice idea. Also, the ideas of Chorlay, who distinguished between mobilizable knowledge and available knowledge like Robert (2002). Chorlay enriches students' available knowledge by meta-tasks, which requires reflection skills.

Furthermore, I obtained helpful database information. For example, the literature database *Publimath* in France (publimath.univ-irem.fr), the bibliographical database within the pre-conference document of ICME-13 (in Proceedings of HPM 2016) and the database within the TRIUMPHS-Project in USA (webpages.ursinus.edu/nscoville/TRIUMPHS.html), where original source projects about algebra, analysis, and topology and others are available for undergraduate mathematics instruction.

As for the social outcome, I met a lot of new friends and hopefully will keep in contact with them. My past myself, don't hesitate to talk to them, when you arrive on Monday.

Interviewer: Which painting or photo would describe your experience at the conference?

Post-conference self: That's a difficult question, because there are so many impressions. I can't summarize them into one picture. If I must choose one of them, I choose the one above. It reminds me of the moment when I was asked to play the part of the renowned scholar Gert Schubring, and had to speak English in front of a big audience. Coincidentally, it reminds me of Argand, the face of the HPM 2016 Poster and Mediterranean Area. Also, I am reminded of new friends with whom I acted in this dramatic presentation.

Interviewer: What advice do you have for me?

Post-conference self (laughing): An advice for myself? Don't miss the "swimming materials" required for the conference dinner!

Sebastian Schorcht
Justus Liebig University Giessen, Germany

ICHME-5
Fifth International Conference on the History of Mathematics Education

19-22 September, 2017
Utrecht, the Netherlands

ICHME-5 First 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). Abstracts of proposed contributions must be submitted before April 1, 2017. The decision about acceptance of proposals will be communicated by May 15, 2017.

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.

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Jenneke Krüger
Freudenthal Institute
University of Utrecht
The Netherlands

CALL FOR NOMINATIONS FOR THE 2017 FELIX KLEIN AND HANS FREUDENTHAL AWARDS

The International Commission on Mathematical Instruction
THE ICMI FELIX KLEIN AND HANS FREUDENTHAL AWARDS COMMITTEE

Since 2003, the International Commission on Mathematical Instruction (ICMI) awards biannually two medals to recognise outstanding accomplishments in mathematics education research:

- the **Felix Klein Award**, for lifelong achievement in mathematics education research,
- the **Hans Freudenthal Award**, for a major programme of research on mathematics education.

The Felix Klein medal is awarded for lifetime achievement in mathematics education research. This award is aimed at acknowledging those excellent senior scholars who have made a field-defining contribution over their professional life. Past candidates have been influential and have had an impact both at the national level within their own countries and at the international level. We have valued in the past those candidates who not only have made substantial research contributions, but also have introduced new issues, ideas, perspectives, and critical reflections. Additional considerations have included leadership roles, mentoring, and peer recognition, as well as the actual or potential relationship between the research done and improvement of mathematics education at large, through connections between research and practice.

The Hans Freudenthal medal is aimed at acknowledging the outstanding contributions of an individual's theoretically robust and highly coherent research programme. It honours a scholar who has initiated a new research programme and has brought it to maturation over the past 10 years. The research programme is one that has had an impact on our community. Freudenthal awardees should also be researchers whose work is ongoing and who can be expected to continue contributing to the field. In brief, the criteria for this award are depth, novelty, sustainability, and impact of the research programme.

See http://www.mathunion.org/icmi/activities/awards/the-medals, for further information about the awards and for the names of past awardees (seven Freudenthal Medals and seven Klein Medals, to date).

For more information about the nomination process see:
http://www.mathunion.org/icmi/activities/awards/call-for-awards-2017/

All nominations must be sent by e-mail to the Chair of the Committee no later than **15 April 2017**.

Prof. Anna Sfard
The University of Haifa, Israel

Have you read these?

Continued Fractions and their Generalizations: A short history of f-expansions

Fritz Schweiger

This book is about the history of f-expansions, their theory, their application, and their connection to other parts of mathematics. Sketches of proofs of some of the theorems about f-expansions–particularly theorems from historical sources–are included not to convince the reader of the truth of the theorem but rather as a way to demonstrate why the theorem is true. These sketches should give a clearer and more easily understood description of the working of the theorem than a hand-waving literary flourish.

Publication Date: May 2, 2016
ISBN/EAN13: 1942795939 / 9781942795933
Language: English
Related Categories: Mathematics / History & Philosophy

Information send it by
Manfred Kronfellner

Have you read these?

Blåsjö, R. (2016). In defence of geometrical algebra. *Archive for History of Exact Sciences*, *70*(3), 325-359.

Bullynck, L. (2016). Histories of algorithms: Past, present and future. *Historia Mathematica, 43*(3), 332-341.

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DeCesare, R. (2016). Robert Patterson: American 'revolutionary' mathematician. *BSHM Bulletin: Journal of the British Society for the History of Mathematics, 31*(1), 31-46.

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Announcements of a doctoral dissertation and Master's theses, produced by scholars and students in Colombia.

Doctoral Dissertation (2016)

Title: Formative potential of the history of the Euclidean theory of proportion in the constitution of mathematics teacher knowledge
Author: Edgar Alberto Guacaneme Suárez

Abstract:
The general research context in which this thesis is placed is the role of the History of Mathematics [HM] in the constitution of mathematical knowledge for teaching [MKT]. And the specific research question addressed by the thesis is what is the educational potential of the history of Euclidean theory of reason and proportion, contained in Book V of Elements, in the constitution of MKT.
In pursuit of an answer, the need for an approach to the state of the art in the reflection and the research on the relationship between Mathematics Education and History of Mathematics is established. From such a state of the art one seeks to explore the relationship "HM – MKT" guided by questions related to 1) the arguments used in favor of the integration of HM in such processes, 2) the aims pursued with such integration, 3) the characteristics of HM that have been linked to the mathematics teachers educational processes, and 4) the methodological strategies that have been designed and implemented for teachers of mathematics to appropriate and use historical discourses. A framework for the relationship mentioned is thus constructed.
Euclidean theory of reason and proportion of Book V of The Elements is then studied to gain insight into this theory. Documents related to the history of reason and proportion are also studied. Based on these studies, the history of Euclidean theory of proportion is analyzed using the analysis categories for the questions "what HM" and "for what HM". The overall result shows that the set of documents covers almost all categories of analysis.
Finally, the educational potential that the documents concerning the Euclidean theory of proportion have in favor of the MKT is established.

Master's Theses

Title: Categories of Uses of History of Mathematics in Mathematics Education

Student: JOHN FREDY ERAZO-CASTRO
Supervisor: LYDA CONSTANZA MORA-MENDIETA

Title: Contributions of History of Mathematics to Pedagogical Content Knowledge on Trigonometric Equations of a Mathematics Teacher Studying for the Master's or Doctorate (in Mathematics Education)

Students: CINDY YESENIA

INDABURO-MORENO, JOJHAN GONZALO JIMÉNEZ-BELLO, CLAUDIA MAYERLY SARMIENTO-MARTÍN
Supervisor: LYDA CONSTANZA MORA-MENDIETA

Title: The Philosophy of Mathematics in Mathematical Knowledge for Teaching

Student: NATALIA MORALES-ROZO
Supervisor: EDGAR ALBERTO GUACANEME-SUÁREZ

In the original Spanish:

Tesis de Doctorado en Educacion (2016)

Potencial formativo de la historia de la teorí a euclidiana de la proporcio n en la constitucio n del conocimiento del profesor de Matema ticas

Edgar Alberto Guacaneme Suárez

La tesis ubica el papel de la Historia de las Matemáticas [HM] en la constitución del conocimiento del profesor de Matemáticas [CPM] como contexto general de investigación y dentro de este la pregunta ¿cuál es el potencial formativo de la historia de la teoría euclidiana de la razón y la proporción, contenida en el Libro V de Elementos, en la constitución del CPM?
En procura de una respuesta, se establece la necesidad de lograr una aproximación al estado del arte de la reflexión e investigación en torno a la relación "Historia de las Matemáticas – Educación Matemática". A partir de tal estado del arte se procura explorar la relación "HM – CPM", guiado por las preguntas relacionadas con los argumentos que se esgrimen a favor de la integración de la HM en tales procesos, las intenciones que se persiguen con dicha integración, las características de la HM que se vincula a los procesos educativos de los profesores de Matemáticas y las estrategias metodológicas que se han diseñado e implementado para que los profesores de Matemáticas se apropien y usen los discursos históricos. Se construye así un marco de referencia para la relación mencionada.
Se estudian entonces la teoría euclidiana de la razón y la proporción del Libro V de Elementos para obtener una perspectiva de esta. Asimismo se estudian los documentos que versan sobre la historia de la razón y proporción. A partir de esto se analiza la historia de la teoría euclidiana de la proporción a través de las categorías de análisis para las pregunta qué HM y para qué la HM. El resultado global muestra que el conjunto de documentos cubre la casi totalidad de las categorías de análisis.
Finalmente, se establece el potencial formativo que los documentos que versan sobre la teoría euclidiana de la proporción tienen a favor del CPM.

Master's Theses

Título: CATEGORÍAS DE USOS DE LA HISTORIA DE LAS MATEMÁTICAS EN LA EDUCACIÓN EN MATEMÁTICAS

Estudiante: JOHN FREDY ERAZO-

CASTRO
Asesora: LYDA CONSTANZA MORA-MENDIETA

Título: APORTES DE LA HISTORIA DE LAS MATEMÁTICAS AL CONOCIMIENTO DIDÁCTICO DEL CONTENIDO DEL PROFESOR DE MATEMÁTICAS EN FORMACIÓN AVANZADA SOBRE LAS ECUACIONES TRIGONOMÉTRICAS

Estudiantes: CINDY YESENIA INDABURO-MORENO, JOJHAN GONZALO JIMÉNEZ-BELLO, CLAUDIA MAYERLY SARMIENTO-MARTÍN
Asesora: LYDA CONSTANZA MORA-MENDIETA

Título: LA FILOSOFÍA DE LAS MATEMÁTICAS EN EL CONOCIMIENTO DEL PROFESOR DE MATEMÁTICAS

Estudiante: NATALIA MORALES-ROZO
Asesor: EDGAR ALBERTO GUACANEME-SUÁREZ

Content provided by
Edgar Alberto Guacaneme Suárez;
translation by Luis Puig;
submitted by Kathy Clark

Announcements of events

Forthcoming BSHM meetings

(The British Society for the History of Mathematics)

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

1. BSHM Christmas Meeting

3 December 2016
Birmingham

A 'History of Mathematics' Day

'Napier's Chessboard Abacus' by **Steve Russ.** Dr Steve Russ is an Associate Fellow at the University of Warwick, a past president of BSHM, a world authority on the life and work of Bernard Bolzano and author of many mathematical books and articles.

'James Clerk Maxwell and the inverse square law of electrostatics' by **Isobel Falconer.** Dr Isobel Falconer is Reader in History of Mathematics, University of St Andrews and is the author of many research publications and articles

'Exhaustion' by **Bob Burn.** Dr Bob Burn is an Honorary Fellow of the University of Exeter. His main research interests are Mathematics and Teacher Education.

'Mathematics in Birmingham in the 1960s' by **Anne Watts**

'Statistical Beginnings for Agricultural Research at Rothamsted Experimental Station' by **Dorothy Leddy**

'Truth or Hegelian obfuscation? Lakatos revisited' by **Tony Gardiner.** Dr Tony Gardiner taught at the University of Birmingham from 1974 to 2012. He has been involved at the forefront of mathematics education for over 40 years and has written numerous mathematical books for young people. In April this year he was the recipient of the Texas A&M University award for Excellence in Mathematics Education.

'*The new Winton Mathematics Gallery at the Science Museum*' by **Jessica Bradford.** Jessica Bradford is the Interpretation Manager of the Science Museum Group. The Winton Gallery opens in December 2016 and was designed by Zaha Hadid.

'*Leibniz on Financial and Insurance Mathematics*' by **Eberhard Knobloch.** Prof. Dr. Eberhard Knobloch, Berlin University of Technology / Berlin Brandenburg (former Prussian) Academy of Sciences and Humanities, is a distinguished historian of Science and Mathematics. He is a past President of the both the International Academy of the History of Science and the European Society for the History of Science.

Organiser: Richard Simpson, BSHM bshm@lagonda.org.uk

2. The Thomsons, a Mathematical Family

18 February 2017
Belfast

3. A History of Mathematical Logic in honour of Ivor Grattan Guinness

27 May 2017
London

https://www.eventbrite.co.uk/e/the-history-of-mathematical-logic-tickets...

Each year since 2015 we have run a one-day conference on mathematics and its history at Birkbeck (University of London) organised by the British Society for the History of Mathematics (BSHM), and supported by the Department of Economics, Mathematics and Statistics at Birkbeck.

This year's event will be on the history of mathematical logic. We chose this theme to honour the eminent mathematical historian Ivor Grattan-Guinness, former President of the BSHM, who died at the end of 2014. So this will be a particularly special conference.

CERME 10: Thematic Working Group 12 History in Mathematics Education

1-5 February 2017
Dublin, Ireland

Leader of the Working Group
Renaud Chorlay (France)
renaud.chorlay@espe-paris.fr

Co-leaders of the Working Group
Kathy Clark (USA), Katalin Gosztonyi (Hungary), Snezana Lawrence (UK)

Scope and focus of the Working Group
History of mathematics in mathematics education continues to receive much attention. However, empirical research and coherent theoretical/conceptual frameworks within this area have emerged relatively recently.
The purpose of this CERME TWG is to provide a forum to approach mathematics education in connection with history and epistemology dedicated primarily to theory and research on all aspects of the role, effect, and efficacy of history and epistemology as elements in mathematics education.

Papers and posters
TWG12 welcomes both empirical and theoretical research papers, and poster proposals related to one or more of the following issues – although any paper or poster of relevance to the overall focus of the group will be taken into consideration:

1. Design and/or assessment of teaching/learning materials using the history of mathematics, preferably with conclusions based on empirical data; all levels can be considered, from early-age mathematics to tertiary education and teacher training.

2. Surveys on the existing uses of history or epistemology in curricula, textbooks, and/or classrooms in primary, secondary, and tertiary levels;

3. History of mathematics education;

4. Relationships between, on the one hand frameworks for and empirical studies on history in mathematics education and, on the other hand, theories, frameworks and studies in other parts of mathematics education research.

ICMT2
II International Conference on Mathematics Textbook Research and Development
(2nd announcement)

7-11 May 2017
Rio de Janeiro, Brazil

(II Conferência Internacional em Pesquisa e Desenvolvimento de Livros Didáticos de Matemática)

www.im.ufrj.br/ictm2
icmt2@im.ufrj.br

Research focused on the analysis and development of textbooks (in conventional format or digital media) has recently gained great prominence in the international arena of research in mathematics education. This prominence is reflected, for example, in the ***International Conference on School Mathematics Textbooks (ICSMT)***, held in Shanghai in 2011, and in the ZDM special issue (Volume 45, Issue 5, September 2013), on textbooks research in mathematics education.

Also reflecting this trend, the first ***International Conference on Mathematics Textbook Research and Development*** (ICMT-2014) took place at the University of Southampton (UK), from 29 to 31 July 2014. About 180 participants, from 30 different countries, attended ICMT-2014. ICMT-2014 proceedings are available on http://eprints.soton.ac.uk/374809/. Visit

also ICMT-2014's official website on: http://blog.soton.ac.uk/icmtrd2014/.

It is our pleasure to announce the ***II International Conference on Mathematics Textbook Research and Development / II Conferência Internacional em Pesquisa e Desenvolvimento de Livros Didáticos de Matemática*** (ICMT2), to be held from 7 to 11 May 2017, at the Federal University of Rio de Janeiro (UFRJ) and at the Federal University of the State of Rio de Janeiro (UNIRIO), Brasil.

The conference is organized by the Federal University of Rio de Janeiro (Universidade Federal do Rio de Janeiro, **UFRJ**), the Federal University of the State of Rio de Janeiro (Universidade Federal do Estado do Rio de Janeiro, **UNIRIO**), the State University of São Paulo (Universidade Estadual Paulista, **UNESP**) and the Federal University of Pernambuco (**UFPE**). It is supported by the Brazilian Mathematics Education Society (**SBEM**), the Brazilian Society of Mathematics (**SBM**), and the Brazilian Society of Applied and Computational Mathematics (**SBMAC**).
ICMT2 will feature different activities, including plenary lectures, symposia, workshops, oral presentations, posters and special activities addressed to teachers. Accepted and presented papers will be published after a peer-review process in Proceedings following the Conference.

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Plenary speakers

- ✓ Kay O'Halloran (Curtin University, Bentley, Australia)
- ✓ João Bosco Pitombeira (Universidade Federal de Mato Grosso do Sul, Campo Grande, Brazil)
- ✓ Ken Saito (Department of Human Sciences, School of Humanities and Social Sciences, Osaka Prefecture University, Osaka, Japan)
- ✓ Zalman Usiskin (University of Chicago, Chicago, USA)
- ✓ Jianpan Wang (Jianpan Wang, East China Normal University, Shanghai, China)

Conference themes

- ✓ Textbook research (concepts, issues, methods, directions, etc.)
- ✓ Textbook analysis (characteristics, treatment of contents and/or pedagogy, etc.)
- ✓ Analysis of historical textbooks
- ✓ Textbook use (by teachers, by students, and/or by other parties)
- ✓ Textbooks and student achievement
- ✓ Textbook development (domain/competence analyses, teaching trajectories, task design, format of presenting the "content" to the student, format of presenting the "content" to the teacher (teacher guides)
- ✓ Textbook policies (governmental educational policy about textbooks, distribution, market strategies)
- ✓ Evolution of textbooks in the light of new digital technologies (including integration of ICT tools and innovation, e-textbook)
- ✓ Other disciplines in mathematics textbooks & mathematics in textbooks of other disciplines
- ✓ Other major relevant issues about mathematics textbooks

Registration fees (in euros)

Until 31 January 2017, registration fees will be as follows. After that date, the fees will increase. Increased registration fees (for after 31 January) will be informed in due course.

Registration must be made through the system that will be available on the conference website.

Category	With conference dinner	Without conference dinner
Standard	160 €	110 €
Graduate student/ school teacher	115 €	65€
One day rate		30 €
Accompanying person	75 €	50 €

Payments with credit card will be possible via paypal.

Key dates

- ✓ Registration deadline (for presenting authors): 3 January 2017
- ✓ Conference: 7 – 10 May 2017

Venue

Rio de Janeiro, also known as Cidade Maravilhosa (Wonderful City), was recently named a World Heritage Site by UNESCO. Despite the city is among the largest urban areas on the planet, it is well known worldwide for its landscapes of exceptional scenic beauty. Its unique geographical location gathers tropical beaches, dramatic mountain ranges, luxuriant rain forest, rivers and waterfalls – all within the urban area.

For further information, visit: http://www.rio.rj.gov.br/web/riotur/.

Visa Information

Citizens from most of Latin American and European countries do not need to apply to visas to short- term visits to Brazil. Visas are required for US citizens, as well as citizens from some African and Asian countries.

Vaccinations may also be required.

For further information, please consult Brazilian consulates in your country of origin, and see: http://www.portalconsular.mre.gov.br/.

Further Information

www.im.ufrj.br/icmt2
icmt2@im.ufrj.br


ESU8
OSLO
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OSLO AND AKERSHUS
UNIVERSITY COLLEGE
OF APPLIED SCIENCES
- All academic activities will be in one building (pictured below)
- The campus is 3 minutes from nearest hotel (on foot), 10 minutes from nearest railway station
- Sunrise about 4:20, sunset 22:20
Welcome!

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The views expressed in this Newsletter may not necessarily be those of the HPM Advisory Board. Please pass on news of the existence of this newsletter to any interested parties. This and previous newsletters 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).

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
94	**12 February 2017**	**March 2017**
95	12 June 2017	July 2017
96	12 October 2017	November 2017

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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.