

Report of the

International Study Group on the Relations between History and Pedagogy of Mathematics

(HPM)

Submitted to ICMI by

Luis Radford, HPM Chair (2012-2016)

June 1st 2016

1. Aims of HPM

HPM seeks to promote both (1) theoretical and (2) classroom based practical research on the history and epistemology of mathematics and its use in the design of classroom mathematical activities and in the improvement of the teaching and the learning of mathematics at all levels.

2. Members of HPM

HPM (<http://www.clab.edc.uoc.gr/hpm/about%20HPM.htm>) brings 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.

3. Research Lines

Some research lines pursued within the group include:

- (1) theoretical and/or conceptual frameworks for integrating history in mathematics education;
- (2) history and epistemology in students and teachers mathematics education;

- (3) the use of original sources in the classroom and their educational effects;
- (4) mathematics and its relation to science, technology, and the arts;
- (5) cultures and mathematics, and
- (6) the history of mathematics education.

4. HPM Structure

HPM is organized as follows:

- (1) a chair;
- (2) an executive committee who advises the current chair on matters of organization and the scientific life of the group;
- (3) an advisory board to which the chair submits propositions concerning scientific and organizational decisions (e.g., the election of the new chair; the thematic content of the HPM scientific activities);
- (4) a scientific committee which is responsible for the reviewing process of papers submitted to the scientific events of the group;
- (5) an editorial team which is in charge of the production and distribution of the HPM Newsletter. (Please see the last page of **Appendix B** to see the name of the members and represented countries), and
- (6) a team of regional HPM Newsletter distributors. HPM has a team of regional HPM Newsletter distributors, who help disseminate information coming from HPM. See **Appendix B** for the list of names and represented countries.

5. Accomplishments during the 2013-2016 term

5.1 Refinement of the HPM administrative structure

During the 2013-16 term, a consulting body was created: The *HPM Executive Committee*. This committee is constituted by the *three* immediate previous chairs who advise the current chair on matters of organization and strategies, and help the chair in crafting propositions to be submitted to the Advisory Board.

The creation of the Executive Committee has added functionality to the decisional processes of the group.

In this term, the members of the HPM Executive Committee are: Evelyne Barbin (HPM Chair 2008-2012); Constantinos Tzanakis (HPM Chair 2004-2008) and Fulvia Furinghetti (HPM Chair 2000-2004).

5.2 The HPM Digital Library

During the 2013-16 term, a new initiative was created in order to make accessible previous HPM Proceedings to the HPM members and all interested individuals in questions concerning the history and the pedagogy of mathematics.

The HPM Digital Library is hosted in an ICMI server (<http://www.mathunion.org/icmi/digital-library/aos-conferences/>).

HPM wishes to thank Professors Ferdinando Arzarello and Abraham Arcavi for agreeing to host the HPM Digital Library in the ICMI website.

So far, the two volumes of the HPM Proceedings of the Braga 1996 meeting and the HPM Proceedings of the 2004 Uppsala Meeting are already available.

The HPM Proceedings of the 2000 Taipei Meeting are under the process of PDF edition and will be made available very soon.

The following Proceedings are ready to be uploaded:

- Proceedings of the 5th European summer university “History and epistemology in mathematics education” (Praga. E. Barbin, N. Stehlíková, & C. Tzanakis (eds.), 2008).
- Proceedings of the 7th European summer university “History and epistemology in mathematics education” (Copenhagen. E. Barbin, U. Jankvist, & T. Hoff Kjeldsen (eds.), 2015).

This year, the Proceedings of the HPM 2016 meeting (Montpellier) will be published in July 2016 *before* the conference and will be accessible through the Digital Library.

5.3 Discussion Groups

A new discussion space in the scientific program of the HPM Satellite Meeting has been created. Indeed, in order to move towards a more dialogical conference structure, and one in particular that could enhance the conversation and exchange between senior and new HPM members, the Advisory Board approved the idea of having Discussion Groups in the HPM 2016 Satellite Meeting. The Discussion Groups are the following:

Discussion Group 1: Geometry

Coordinators: Evelyn Barbin (France) and Leo Rogers (UK)

Discussion Group 2: History of mathematics in teachers' education

Coordinators: Kathy Clark (USA) and Sebastian Schorcht (Germany)

Discussion Group 3: Original sources in the teaching and learning of mathematics

Coordinators: Tinne Hoff Kjeldsen (Denmark) and Janet Barnett (USA)

6. HPM Activities

6.1 Conferences

During the 2013-16 term, HPM has organized two main conferences:

a) *The seventh European Summer University (ESU 7) History and Epistemology in Mathematics Education* (Chairs: Barbin, É., Jankvist, U., Kjeldsen, T.H.), 2015. Copenhagen: Danish School of Education, Aarhus University.

b) *The ninth quadrennial meeting of HPM 2016 satellite meeting of ICME*. Montpellier, France, July 18-22, 2016. (Chairs: L. Radford, Fulvia Furinghetti, Thomas Hausberger). For details, please visit: <http://hpm2016.sciencesconf.org>

The HPM 2016 scientific program includes the following plenary speakers: Renaud Chorlay (France), Ahmed Djebbar (France), Victor Katz (USA), Harm Jan Smid (The Netherlands), Costas Tzanakis (Greece), and Wang Xiaojin (China).

There is also a public lecture by Christian Gerini: JOSEPH-DIEZ GERGONNE (1771-1859), PROFESSEUR ET RECTEUR D'ACADÉMIE À MONTPELLIER Éditeur du premier grand journal de l'histoire des mathématiques et de leur enseignement : les Annales de Gergonne (1810-1831).

A dramatic presentation on Gergonne will also be presented during the HPM 2016 Conference; the actors will be chosen from the conference participants.

The second announcement of the meeting can be found in **Appendix A**.

c) HPM at ICME-13

In addition to the presentation that HPM will make at ICME-13 as an affiliated group, two thematic studies groups will represent HPM at ICME-13:

TSG 24

History of the teaching and learning of mathematics

Co-chairs:

Fulvia Furinghetti (Italy) furinghetti@dima.unige.it

Alexander Karp (USA)

apk16@columbia.edu

Team members:

Henrike Allmendinger (Germany)

Harm Jan Smid (Netherlands)

Johan Prytz (Sweden)

IPC Liaison person: Alain Kuzniak (France)

TSG 25

The Role of History of Mathematics in Mathematics Education

Co-chairs:

Costas Tzanakis (Greece) tzanakis@edc.uoc.gr

Xiaoqin Wang (China) xqwang@math.ecnu.edu.cn

Team members:

Kathleen Clark (USA)

Tinne Hoff Kjeldsen (Denmark)

Sebastian Schorcht (Germany)

IPC Liaison person: Alain Kuzniak
(France)

6.2 Other

6.2.1 HPM in the Media

HPM has been featured on several media:

Le bulletin de juin de la Commission Française pour l'Enseignement des Mathématiques (<http://www.cfem.asso.fr/liaison-cfem/lettre-cfem-juin%202016>)

Le bulletin de février de la Commission Française pour l'Enseignement des Mathématiques.

(<http://www.cfem.asso.fr/liaison-cfem/lettre-cfem-fevrier%202016>)

Announcements about HPM's goals and invitations to join HPM have been done through several newspapers, including the PME Newsletter and the Canadian Mathematics Education Study Group (CMESG) Newsletter.

6.2.2 Conferences

The HPM chair gave a conference at the XI Brazilian Seminário Nacional de História da Matemática, which was held at the Universidade Federal do Rio Grande do Norte, from March 28 to April 1st 2015.

The HPM chair was invited to participate in meeting *Hermeneutics in Mathematics Education: History of Mathematics to Imagine the Future and Understand the Perspective of Others* (University of Tsukuba, Japan, Sep 30, 2015). The HPM chair participated virtually. A compte rendu of this meeting was published in one of the Newsletters.

6.2.3 The HPM Newsletter

The HPM Newsletter continued to appear three times a year.

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. A copy of the the latest issue can be found in Appendix B.

APPENDIX A

The HPM 2016 Satellite Meeting
Second Announcement

HPM 2016
SECOND ANNOUNCEMENT

History and Pedagogy of Mathematics
The HPM Satellite Meeting of ICME-13

“Mathematics in the Mediterranean”

July 18 to 22, 2016
Montpellier, France

Website

The website is available at <http://hpm2016.sciencesconf.org>

Use it as a very efficient tool to promote the HPM 2016 Satellite Meeting worldwide, for online registration, and to obtain information on accommodations, excursions, and sightseeing, etc.

Aim and focus

The HPM 2016 Satellite Meeting is the ninth quadrennial meeting of the International Study Group on the Relations between the History and Pedagogy of Mathematics (the HPM Group), affiliated with ICMI. It is a satellite meeting of the corresponding ICME International Congress on Mathematical Education (ICME) and is scheduled a few days before or after ICME.

The 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.

Time and place

The HPM 2016 Satellite Meeting will be held from **July 18 to July 22, 2016** in **Montpellier, France**. It is organized by the HPM group and IREM de Montpellier and will take place at the *Faculty of Education of the University of Montpellier, 2 place Marcel Godechot*.

Montpellier is a beautiful town, very famous for its culture and history. Its university, one of the oldest universities in the world, is where Joseph D. Gergonne published in the early 19th century one of the oldest mathematical journals. Gergonne's portrait appears in the logo and the website banner of the Conference.

ICME-13 will be held from **July 24 to July 31, 2016** in **Hamburg, Germany**. Its scientific program includes oral presentations and activities on the history and pedagogy of mathematics and on the history of mathematical teaching.

Main themes of the HPM 2016 Satellite Meeting

The theme of the HPM 2016 Satellite Meeting is "Mathematics in the Mediterranean." The program and activities 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.
6. Topics in the history of mathematics education.
7. Mathematics in Mediterranean countries.

Activities during HPM 2016

The HPM 2016 Satellite Meeting comprises a scientific program and social activities.

The scientific program includes:

- plenary lectures;
- a public lecture;
- panels;
- discussion groups;
- workshops;
- parallel sessions where participants present research reports;
- poster exhibitions; and
- exhibitions of books and other didactic material.

Plenary sessions, discussion groups, and panels deal with the main topics of the conference. Plenary speakers, panelists, and coordinators of discussion groups have been invited by the scientific committee.

Social activities include a gala dinner and excursions (please see below).

Plenary Lectures

Les sources originales dans la salle de classe et leurs effets éducatifs

Renaud Chorlay, ESPÉ de l'académie de Paris, France

Mathématiques dans les pays méditerranéens : La connexion Andalousienne et Maghrébinne

Ahmed Djebbar, Université de Lille, France

The mathematical cultures of medieval Europe

Victor J. Katz, Professor Emeritus, University of the District of Columbia, Washington, DC, USA

Formative years: Hans Freudenthal in prewar Amsterdam

Harm Jan Smid, Delft University of Technology, The Netherlands

Mathematics and physics: An innermost relationship. Some didactical implications for their interdisciplinary teaching and learning

Constantinos Tzanakis, University of Crete, Greece

Integrating the history of mathematics into mathematics teaching: Some experience from China

Wang Xiaoqin, Shanghai, China

Public Lecture

J.-D. Gergonne (1871-1859) à Montpellier (1816-1859) : un personnage important de l'histoire des mathématiques, de leur philosophie, de leur diffusion et de leur enseignement

Christian Gerini, Université de Toulon - Université Nice Sophia Antipolis, France

Discussion Groups

Discussion Group 1: Geometry

Coordinators: Evelyn Barbin (France) and Leo Rogers (UK)

Discussion Group 2: History of mathematics in teachers' education

Coordinators: Kathy Clark (USA) and Sebastian Schorcht (Germany)

Discussion Group 3: Original sources in the teaching and learning of mathematics

Coordinators: Tinne Hoff Kjeldsen (Denmark) and Janet Barnett (USA)

Panels

Panel 1: Theoretical and/or conceptual frameworks for integrating history in mathematics education

Michael Fried, Coordinator (Israel)

David Guillemette (Canada)

Niels Jahnke (Germany)

Panel 2 : Mathematics in Mediterranean countries

Marc Moyon, Coordinator (France)

Mahdi Abdeljaouad (Tunisia)

Eva Caianiello (France and Italy)

Official Languages

The official languages of HPM 2016 are English and French.

All plenary talks will be in one of the official languages with PowerPoint slides in both official languages.

Oral presentations will be given in either English or French.

Proceedings

The proceedings of HPM 2016 will be published electronically, in PDF format, and available at no charge for download from the website before the meeting.

Printed copies can be purchased at the conference (35 € per copy). Printed copies need to be ordered in advance.

Important dates

Submission of abstracts: **October 31, 2015**

Notification of acceptance (or not) of the submitted abstracts: **November 30, 2015**

Submission of full texts: **February 8, 2016**

Notification of acceptance (or not) of the submitted texts: **April 13, 2016**

End of early registration: **April 29, 2016**

End of regular registration: **June 22, 2016**

Conference: July 18 to 22, 2016

Registration fees

- *Early registration (before April 29, 2016): 250 € (student or young researcher 150 €)*
- *Regular registration (between April 29 and June 22, 2016): 300 € (student or young researcher 200 €)*
- *Registration after June 22, 2016, or at the conference: 350 €*

The conference fee includes: 5 lunches, 9 coffee breaks, as well as the gala dinner on the seaside and an excursion.

Note: Registration is now open: <http://hpm2016.sciencesconf.org/page/payment>

- **Access to this page requires that you be registered on the website and logged in.**

Accommodations

Two accommodations options are available:

A) Single rooms in a student residence

- Single room: 140 € (6 nights, single rate. Check in Sunday July 17, 2016. Check out Saturday July 23, 2016. Breakfast included).

You can choose this option and pay the fees when proceeding to the final online registration. The organizing committee will book the room on your behalf.

The residence is situated 3 tram stations from the conference venue and within walking distance (20 min).

B) Hotel

If you choose this option, you will have to book and pay directly to the hotel (registration without accommodation).

You will find a list of recommended hotels below.

List of hotels in Montpellier

Within walking distance of the conference locusvenue:

[Hôtel Acapulco](#)** [Hôtel du Parc](#)** [Hôtel les Troènes](#)**

City centre (within easy access to public transportation)

[Ibis Comédie](#)*** [Best Western - Eurociel](#)*** [Hôtel Ulysse](#)*** [Hotel des Arts](#)** [Hotel du Palais](#)** [Hôtel Mistral](#)** [Hôtel Littoral](#) [Hôtel des Fauvettes](#)

Appart'hotels

City centre (within easy access to the tram)

[Goélia Sun City](#)

[Appart 'Hotel Eurociel](#)

[Citadines Antigone Montpellier](#)

[Odalys les Occitanes](#)

In the south of the city

[Abitel](#)

For further information, please contact: [Montpellier Tourist Information Center - Accommodation](#)

Visits and excursions

A tour will take place on Wednesday, July 20, in the afternoon, before the gala dinner. It is included in the registration fee.

When you register, please choose one of the following four tours that have been selected for you.

A) Excursion to Aigues-Mortes (12h30-17h30, picnic baskets provided)

Visit the 13th century fortified city, built on the initiative of Louis IX to give the kingdom a port on the Mediterranean. It was from here that he set off for the crusades. Visit the Tower of Constance, one of France's most impressive keeps, and the 1,634-metre-long ramparts.

Departure by bus from Montpellier.

B) Excursion to Saint-Guilhem-le-Désert (12h30-17h30, picnic baskets provided)

Tour the world heritage medieval village of Saint-Guilhem-le-Désert. This village, which lies on the Way of Saint James the Apostle, was chosen in the year 804 as the seat of the Abbey of Gellone. After visiting the abbey, one of the Bas-Languedoc's most prestigious Roman sites, take the time to discover the surrounding streets and alleyways of the medieval village, one of the most beautiful in France.

Visit to Clamouse cave. Its amazing abundance of stalagmites and stalactites has made it one of the most popular caves in France.

Departure by bus from Montpellier.

C) Visit to Montpellier historic centre and Mikveh (14h30-16h30)

Place de la Comédie, Place de la Canourgue, Place du Peyrou... from square to square, we will guide you through the maze of medieval alleyways as you explore Montpellier through the ages. Montpellier harbours many secrets and to discover them, our guides can open doors to which only the Tourist Office has the keys. See the courtyard of a 17th or 18th century mansion house and entrance to the famous Mikveh (12th century Jewish ceremonial bath), one of Montpellier's real jewels.

D) Visit to the faculty of medicine (14h30-16h30)

The Montpellier Tourist Office invites you to join an exclusive tour of the western world's oldest medical school. Formerly a medieval monastery, then an Episcopal palace, it is still in use now as the present medical school. Next, the guide will take you right to the heart of a remarkable site: the Conservatory of Anatomy, which has a series of displays describing the human body in the style of a 19th century cabinet of curiosities.

HPM 2016 Chairs

- Luis Radford (Chair), lradford@laurentian.ca
- Fulvia Furinghetti (Co-chair), furinghetti@dima.unige.it
- Thomas Hausberger (Co-chair), thomas.hausberger@univ-montp2.fr
- Anne Cortella (Co-chair), anne.cortella@univ-montp2.fr

The HPM Executive Committee

Evelyne Barbin, France
Fulvia Furinghetti, Italy
Constantinos Tzanakis, Greece

The International Scientific Committee (ScC)

Evelyne Barbin, France
Renaud Chorlay, France
Viviane Durand-Guerrier, France
Abdellah El Idrissi, Morocco
Gail FitzSimons, Australia
Fulvia Furinghetti, Italy
Thomas Hausberger, France
Masami Isoda, Japan
Luis Puig, Spain
Anjing Qu, China
Luis Radford, Canada (Chair)
Man Keung Siu, Hong Kong SAR, China

Bjørn Smestad, Norway
Constantinos Tzanakis, Greece

The Local Organizing Committee (LOC)

Aurélie Chesnais
Anne Cortella (Co-chair)
Viviane Durand-Guerrier
Thomas Hausberger (Chair)
Simon Modeste
Nicolas Saby

HPM Advisory Board

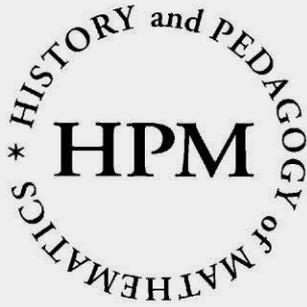
Bjarnadóttir, Kristín	University of Iceland, School of Education, Reykjavík, Iceland
Booker, George	Griffith University, Brisbane, Australia
Chorlay, Renaud	IREM, Université Paris 7, 175-179 rue Chevaleret, 75013 Paris, France
Clark, Kathy	Florida State University, Tallahassee, Florida 32306 – 4459, USA
D'Ambrosio, Ubiratan	Pontificia Universidade, Catolica de Sao Paulo, Brazil
El Idrissi, Abdellah	Ecole Normale Supérieure, BP 2400, ENS, Marrakech, CP. 40000 Maroc
Fasanelli, Florence	American Association for the Advancement of Science, USA
FitzSimons, Gail	68 Bradleys Lane, Warrandyte, Victoria 3113, Australia
Hornig, Wann-Sheng	Department of Mathematics, National Taiwan Normal University, Taiwan
Hwang, Sunwook	Department of Mathematics, Soongsil University, Seoul, Korea
Isoda, Masami	Graduate School of Comprehensive Human Science, University of Tsukuba, Japan
Jahnke, Niels	Fachbereich Mathematik, Universität Duisburg- Essen, Germany
Jankvist, Uffe	Aarhus University, Department of Education, Denmark

Kaijser, Sten	Department of Mathematics, University of Uppsala, Uppsala, Sweden
Katz, Victor	University of the District of Columbia, Washington, DC, USA
Kjeldsen, Tinne Hoff	Department of Science, Systems and Models. Roskilde University. Denmark
Kronfellner, Manfred	Vienna University of Technology, Vienna, Austria
Lakoma, Ewa	Institute of Mathematics Military University of Technology Warsaw, Poland
Lawrence, Snezana	Bath Spa University, Bath, UK
Massa-Esteve, Maria Rosa	Centre de Recerca per a la Història de la Tècnica, Matemàtica Aplicada I, ETSEIB, Universitat Politècnica de Catalunya, Av. Diagonal, 647, 08028 Barcelona, Spain
Pengelley, David	Department of Mathematical Sciences, New Mexico State University, Las Cruces, USA.
Puig, Luis	Departamento de Didáctica de las Matemáticas, Universitat de València Estudi General, Spain
Qu, Anjing	Department of Mathematics at Northwest University, Xian, China
Roque, Tatiana	Universidade Federal do Rio de Janeiro, Brazil
Schubring, Gert	IDM, Universitat Bielefeld, Postfach 100 131, D-33501 Bielefeld, Germany
Siu, Man-Keung	Department of Mathematics, University of Hong Kong, Hong Kong SAR, China
Smestad, Bjørn	Faculty of Education, Oslo University College, Norway
Stein, Robert	California State University, San Bernardino, USA.
Weeks, Chris	Downeycroft, Virginstow Beaworthy, UK
Winicki-Landman, Greisy	Department of Mathematics and Statistics, California State Polytechnic University, USA.

APPENDIX B

HPM Newsletter

No. 91, March 2016



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

No. 91

March 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 CHAIR OF HPM

Dear colleagues,

In this edition of the HPM Newsletter, I would like to provide an update on our forthcoming **2016 HPM Satellite Meeting** of the *International Congress on Mathematical Education (ICME)*.

As you might know, our **Satellite Meeting** will take place in Montpellier, from July 18 to July 22, 2016.

The host of the Satellite Meeting is the Faculty of Education of the Université de Montpellier:

2 place Marcel Godechot - BP 4152
34092 MONTPELLIER CEDEX 5

We are pleased to inform you that **registration is now open**.

If you want to take advantage of the early registration rate, please register before April 29, 2016.

A **public conference** has been added to our scientific program.

The subject of the conference is mathematician Joseph Diaz Gergonne who was the editor of what came to be one of the most important mathematical journals of his time—*Annales de mathématiques pures et appliquées*, founded in 1810. The public conference will be given by Professor Christian Gerini. Commenting on the 19th century mathematician, Gerini notes that “Gergonne was a leading representative of the relationship between mathematics, history and pedagogy.”

On the social side of the **2016 HPM Satellite Meeting**, you will find on the conference [web page](http://hpm2016.sciencesconf.org) (<http://hpm2016.sciencesconf.org>) information about several excursions and a gala dinner.



The HPME 2016 Scientific Committee and the Local Committee are working hard to ensure a conference of the best scientific quality in a Mediterranean environment that is steeped in history.

I hope to see you all in Montpellier this summer.

Luis Radford

HPM Chair

Université Laurentienne, Canada

Univ. Federal do Rio Grande do Norte, Brasil

Circulation: Mathematics, History, Education

26 – 27 May, 2016

Nantes, France

Seminar in Honor of Évelyne Barbin

We are pleased to announce this seminar in honor of **Évelyne Barbin**, which will take place at the **University of Nantes** (France).

Registration, as well as all information for the event, including the conference program can be found on the dedicated website:

<http://www.math.sciences.univ-nantes.fr/CMHE2016/>.

Speakers during the seminar include:

- Dominique Bénard (Université du Maine)
- François de Gandt (Université de Lille III)
- Tinne Hoff Kjeldsen (University of Copenhagen, Denmark)
- René Guitart (Université Paris Diderot)
- Yannick Marec (Université de Rouen)
- Anne-Marie Marmier (Université de Lille)
- David Rabouin (Université Paris-Diderot)
- Léo Rogers (Université d'Oxford)
- Dominique Tournes (Université de la Réunion)
- Norbert Verdier (Université de Paris Sud)

We hope to see you there!

The organizing committee:

*G. Moussard,
J. Auvinet,
X. Saint Raymond
(LMJL)*

Chers collègues:

Nous avons le plaisir de vous inviter aux **Journées scientifiques en l'honneur d'Évelyne Barbin** qui auront pour thème: **Circulation: Mathématiques, histoire, enseignement.**

Elles se tiendront du **26 au 27 mai 2016, à l'Université de Nantes** (Amphi Pasteur, UFR Sciences et Techniques, campus Lombarderie).

Vous pouvez d'ores et déjà vous y inscrire sur le site dédié:

<http://www.math.sciences.univ-nantes.fr/CMHE2016/>

où vous trouverez toutes les informations nécessaires, ainsi que le programme des conférences.

En espérant vous y voir nombreux.

Le comité d'organisation:

*G. Moussard,
J. Auvinet,
X. Saint Raymond
(LMJL)*



**ICME 13 TSG 25
History of Mathematics in
Mathematics Education:
Recent developments**

**24 – 31 July, 2016
Hamburg, Germany**

One of the *Topic Study Groups* (TSG) at the forthcoming ICME 13 (Hamburg, Germany, 24-31/7/2016) is TSG 25: *The Role of History of Mathematics in Mathematics Education.*

Its Organizing Team (OT) has performed a survey on the developments in the HPM domain since 2000, the year of publication of *History in Mathematics Education: The ICMI Study*, edited by J. Fauvel & J. van Maanen (Kluwer 2000). This volume has been a highly collective work and a landmark in the area. Since its publication, the HPM domain has expanded considerably and intensive research activity has been realized worldwide that led to a great deal of thoughtful publications both on theoretical issues and empirical investigations.

Nevertheless, a comprehensive survey is still lacking. Therefore, the survey carried out by the OT of TSG 25 aims to contribute to filling the gap, at the same time providing a useful tool to anyone with interest in this domain and wants to become informed on the main issues and to have a concise guide of the work done in this area.

With focus on the period after the publication of the above *ICMI Study Volume*, this survey attempts to provide concise annotated reference to existing work in this area, related to the TSG 25 main themes, namely:

1. Theoretical and/or conceptual frameworks for integrating history in mathematics education;
2. History and epistemology implemented in Mathematics Education, considered from either the cognitive or/and affective points of view:
 - (a) Classroom experiments at school, the university and teacher pre- & in-service education;
 - (b) Teaching material: textbooks, resource material of any kind (written documents, guidelines, readers, annotated bibliographical surveys, audiovisual material, relevant websites/web pages, etc).
3. Surveys on:
 - (a) Research on the History of Mathematics in Mathematics Education;
 - (b) The History of Mathematics as it appears in curriculum and/or textbooks.
4. Original sources in the classroom, and their educational effects;
5. History and epistemology as a tool for an interdisciplinary approach in the teaching and learning of mathematics and the sciences by unfolding their fruitful interrelations; and
6. Cultures and mathematics fruitfully interwoven.

The structure of the survey runs roughly as follows:

Section 1 explains its rationale and formulates the key issues explicitly addressed in and/or implicitly underlying the work done in this area:

- *Which history is suitable, pertinent, and relevant to Mathematics Education?*
- *Which role can History of Mathematics play in Mathematics Education?*
- *To what extent has History of Mathematics been integrated in Mathematics Education (curricula, textbooks, educational aids/resource material, teacher education)?*
- *How can this role be evaluated and assessed and to what extent does it contribute to the teaching and learning of mathematics?*

Section 2 gives a brief historical account of the development of the *HPM domain* with focus on the main activities in its context and their outcomes since 2000, a short presentation of journals and newsletters, and an outline with comments on the key issues mentioned above and references to the literature for details.

Section 3, constitutes the major part of the survey. It provides a sufficiently comprehensive bibliographical survey of the work done since 2000:

- Briefly annotated collective works (collective volumes, special issues of Mathematics Educational journals devoted to the HPM perspective, conference proceedings, resource material);
- Individual works on one or more of the above mentioned six main themes of

TSG 25 in the form of books & doctoral dissertations, papers in scientific journals, and individual chapters in collective volumes or conference proceedings.

For each reference there is explicit indication of the TSG 25 main themes to which it is mostly related. In addition, though the emphasis is on research results of an as broad as possible international interest, due attention is paid to nationally-oriented implementation of the *HPM perspective* as well. Even though several voluminous collective works exclusively devoted to the *HPM perspective* (e.g. some collective volumes or conference proceedings) contain several important contributions, the latter are not included in the bibliographical survey as separate items in order to keep this survey to a reasonable size. Instead, all collective works are annotated briefly.

Section 4 summarizes the main points of the survey, whereas, Section 5 contains all references given in section 2.

The survey can be accessed via the HPM website at <http://www.clab.edc.uoc.gr/HPM/HPMinME-TopicalStudy-18-2-16-NewsletterVersion.pdf>

We emphasize, however, that this survey should be considered only as a **working document** to be kept updated both by the OT of TSG 25 and/or other members of the community, who will point out further references that are missing. Any comments, suggestions, amendments and further bibliographical references are most desirable and welcome!

The HPM domain is at a particularly interesting juncture right now, 15 years after the publication of the comprehensive ICMI study - with much and varied work taking place all over the globe. Therefore, this survey may be both a continuously updated useful tool and a key component for heralding a potentially new and interesting era of work to be done.

The Organizing Team of TSG 25 of
ICME 13

Kathleen Clark
Tinne Hoff Kjeldsen
Sebastian Schorcht
Constantinos Tzanakis
Xiaoqin Wang





ICMT2
II International Conference on
Mathematics Textbook
Research and Development

7 – 11 May, 2017
Rio de Janeiro, Brazil

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

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), Brazil.

The organization of ICMT2 in Brazil is a collaborative initiative of the Brazilian Society of Mathematics Education (SBEM), the Brazilian Mathematical Society (SBM), the Brazilian Society of Applied and Computational Mathematics (SBMAC) and the Mathematical Space in Portuguese Language/ International Committee on Mathematics Instruction (EMeLP / ICMI).

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.

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



Modalities of contributions, besides invited lectures:

- oral presentation (in English, 30 minute presentation; abstract 1 page incl. references)
- symposium (in English, 180 mins)¹
- workshop (in English, 120 mins)²
- workshop for teachers (in Portuguese, 120 mins)

¹ A symposium is organised by one or more researchers to discuss jointly, based on submitted papers, a specific issue of the thematic spectrum of the conference.

² A workshop is a kind of activity that allows participants to work (in small teams) around prepared documents, guided by specific questions.

- poster presentation (1 page abstract, in English, one time slot, 60 minutes)

In general, each applicant can submit at most two proposals (including oral presentations, workshops, etc.) with his/her name as first author.

Key dates:

- submission of proposal for a symposium: 15 August 2016
- information about acceptance of a symposium proposal: 15 September 2016
- submission of paper abstracts within symposia: 31 October 2016
- abstract submission for oral presentation, workshop and poster: 31 October 2016
- information about acceptance of such submissions: 15 December 2016
- registration fee: will be informed in the next Announcement
- registration deadline: 3 January 2017
- Conference: May, 7th to 11th, 2017

International Programme Committee (IPC):

- Rúbia Amaral (UNESP, Brazil) – **Secretary**
- Ubiratan d'Ambrosio (UNIAN, Brazil) – **Honorary President**
- Marcelo Borba (UNESP, Brazil)
- Rute Borba (Universidade Federal de Pernambuco, Brazil)
- Marcos Cherinda (Universidade Pedagógica de Moçambique)
- Lianghuo Fan (University of Southampton, UK) – **Co-chair**
- Victor Giraldo (Universidade Federal do Rio de Janeiro, Brazil) – **Local Chair**

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- Jeremy Kilpatrick (University of Georgia, USA)
- Jian Liu (Beijing Normal University, China)
- Eizo Nagasaki (National Institute for Educational Policy Research, Japan)
- Michael Otte (UNIAN, Brazil)
- Johan Prytz (Uppsala Universitet, Sweden)
- Angel Ruiz (Universidad de Costa Rica, Costa Rica)
- Kenneth Ruthven (University of Cambridge, UK)
- Gert Schubring (UFRJ, Brazil/Universität Bielefeld, Germany) – **Chair**

- Verônica Gitirana (UFPE)
- Carmen Mathias (UFMS)
- João Frederico Meyer (UNICAMP)
- João Bosco Pitombeira (PUC-Rio)
- Cydara Ripoll (UFRGS)
- Walcy Santos (UFRJ)
- Fábio Simas (UNIRIO)
- Ralph Teixeira (UFF)

Further Information:

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The conference is organized by the Federal University of Rio de Janeiro (Universidade Federal do Rio de Janeiro, UFRJ), the State University of São Paulo (Universidade Estadual Paulista, UNESP), the Federal University of Pernambuco (UFPE) and the Federal University of the State of Rio de Janeiro (Universidade Federal do Estado do Rio de Janeiro, UNIRIO). It is supported by the Brazilian Society of Mathematics (SBM), the Brazilian Mathematics Education Society (SBEM), and the Brazilian Society of Applied and Computational Mathematics.

Local Organization Committee (LOC):

- Lourdes Werle de Almeida (UEL)
- Rúbia Amaral (UNESP) – **Co-chair**
- Franck Bellemain (UFPE)
- Marilena Bittar (UFMS)
- Victor Giraldo (UFRJ) – **Chair**



***Educational Implications of
the History and Philosophy of
Science and Mathematics
(PhD course)***

**19 – 23 September 2016
Copenhagen, Denmark**

This international doctoral course will focus on the utilization of historical and philosophical scholarship to inform science and mathematics education.

Among the course lecturers are Michael Matthews (founding editor of Science & Education), Peter Heering (Past President IHPST), Tinne Hoff Kjeldsen (Didactics and History of Mathematics), Helge Kragh (History of Physics) and Jesper Lützen (History of Mathematics).

Fee

The course is free of charge and lunch is included. Participants must secure their own travel expenses.

Registration

Please register by uploading one page description of your current research or development project and a one page CV no later than July 1.

Applicants will be informed of their acceptance by July 5 and a detailed program will be online by August 1. There is a limit of 25 doctoral students.

More information about the course and a registration link can be found at www.ind.ku.dk/hpscource

Ricardo Karam
Department of Science Education
University of Copenhagen





Have you read these?

Abdeljaouad, M. (2015). Question-and-answer formats in mathematics textbooks (1500-1850). *International Journal for the History of Mathematics Education*, 10(2).

Ausejo, H. (2015). New perspectives on commercial arithmetic in Renaissance Spain. In D. E. Rowe & W.-S. Horng (Eds.), *A delicate balance: Global perspective on innovation and tradition in the history of mathematics* (pp. 181-207). Cham, Heidelberg, New York, Dordrecht, London: Springer. DOI 10.1007/978-3-319-12030-0

Bajri, S.; Hannah, J. & Montelle, C. (2015). Revisiting Al-Samaw'al's table of binomial coefficients: Greek inspiration, diagrammatic reasoning and mathematical induction. *Archive for History of Exact Sciences*, 69(6), 537-576.

Ball, D. (2015). 'Thick-rinded fruit of the tree of knowledge': mathematics education in George Eliot's novels. *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, 30(3), 217-226.

Barbin, E. (2015). Descriptive geometry in France: History of Élémentation of a Method (1795-1865). *International Journal for the History of Mathematics Education*, 10(2).

Bellissima, F. (2015). Propositions VIII.4–5 of Euclid's Elements and the compounding of ratios on the monochord. *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, 30(3), 183-199.

Chabás, J. & Goldstein, B. R. (2015). Ibn al-Kammād's *Muqtabis* zij and the astronomical tradition of Indian origin in the Iberian Peninsula. *Archive for History of Exact Sciences*, 69(6), 577-650.

Clark, K. (2015). *Jost Bürgi's Aritmetische und Geometrische Progreß Tabulen (1620): Edition and commentary*. Basel: Birkhäuser.

Cretney, R. (2016). Editing and reading early modern mathematical texts in the digital age. *Historia Mathematica*, 43(1), 87-97.

Dauben, J. W.; Guicciardini, N.; Lewis, A. C.; Parshall, K. H. & Rice, A. C. (2015). Ivor Grattan-Guinness (June 23, 1941–December 12, 2014). *Historia Mathematica*, 42(4), 385-406.

Dawes, J. (2016). After 1952: The later development of Alan Turing's ideas on the mathematics of pattern formation. *Historia Mathematica*, 43(1), 49-64.

Del Centina, A. (2016). Poncelet's porism: a long story of renewed discoveries, I. *Archive for History of Exact Sciences*, 70(1), 1-122.

Ehrhardt, C. (2015). Tactics: In search of a long-term mathematical project (1844–1896). *Historia Mathematica*, 42(4), 436-467.

Fadlelmula, F. K. (2015). Pre-service teachers' point of views about learning history of mathematics: a case study in Turkey. *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, 30(3), 243-252.

Franchella, M. (2016). In the footsteps of Julius König's paradox. *Historia Mathematica*, 43(1), 65-86.

Furinghetti, F. (2015). ICMI Portrait Gallery of officers and eminent figures. *International Journal for the History of Mathematics Education*, 10(2).

Gagatsis, A.; Kiliari, E. & Papadaki, I. (2015). The practical arithmetic of Petros Argyros in relation to the Abaci tradition and the first Greek printed book of arithmetic, Logariastiki. *International Journal for the History of Mathematics Education*, 10(2).

Hunt, J. L. & Sharp, J. (2015). Decoding William Scrots' anamorphic portrait of Edward VI. *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, 30(3), 200-216.

Kichenassamy, S. (2015). Continued proportions and Tartaglia's solution of cubic equations. *Historia Mathematica*, 42(4), 407-435.

Kosmann-Schwarzbach, Y. (2015). Women mathematicians in France in the mid-twentieth century. *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, 30(3), 227-242.

Robson, E. (2015). Subverting expectations: memories of editing with Jackie. *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, 30(3), 178-182.

Rowe, D. E. (2015). An *Intelligencer* quiz on Gauss and Gaussian legends. *The Mathematical Intelligencer*, 37(4), 45-47.

Schubring, G. (2015). *Introduction to biographies of IMUK/ICMI presidents: Felix Klein; David Eugene Smith*. *International Journal for the History of Mathematics Education*, 10(2).

Uliivi, E. (2015). Masters, questions and challenges in the abacus schools. *Archive for History of Exact Sciences*, 69(6), 651-670.

Verburt, L. M. (2015). The objective and the subjective in mid-nineteenth-century British probability theory. *Historia Mathematica*, 42(4), 468-487.

Ycart, B. (2016). Jakob Bielfeld (1717-1770) and the diffusion of statistical concepts in eighteenth century Europe. *Historia Mathematica*, 43(1), 26-48.

Zhu, Y. (2016). Different cultures of computation in seventh century China from the viewpoint of square root extraction. *Historia Mathematica*, 43(1), 3-25.



Announcements of events



Forthcoming BSHM meetings

(The British Society for the History of Mathematics)

<http://www.dcs.warwick.ac.uk/bshm/events.html#forthcoming>

1. Celebrating the History of Women in Mathematics at Manchester

Wednesday 9 March 2016 (16.30)
School of Mathematics' Alan Turing Building, Manchester University.

This event will celebrate the lives of three female mathematicians, Phyllis Nicolson, Hanna Neumann and Bertha Swirles, who not only made significant contributions to science but also lived incredible lives, thus earning a place in the history of mathematics in Manchester.

<http://www.maths.manchester.ac.uk/news-and-events/events/bshm/>

2. From Fibonacci to da Vinci: the Italian commercial revolution

Wednesday, 23 March 2016
University of Derby

ABSTRACT: The two Leonardos mark the approximate bounds of a period of prolific commercial activity in southern Europe, particularly in Italy, during which

our modern numerals became known and accepted into everyday use. This talk will trace the journey of the new numerals from India through the Middle East and into Europe, and explore their reception here, and why merchants of the time found them so attractive that they were prepared to make the considerable effort required to learn how to use them.

Fenny Smith

3. Mathematics emerging: A tribute to Jackie Stedall and her influence on the history of mathematics

Saturday, 9 April 2016 to Sunday, 10 April 2016

The Queen's College, Oxford

Programme: The broad theme of the meeting is sixteenth- and seventeenth-century algebra. This BSHM event is being supported by the London Mathematical Society, the International Committee for the History of Mathematics, The Queen's College, Oxford, and the Oxford University Mathematical Institute.

The main speakers are:

- Dr. Philip Beeley (Oxford):
'To the publicke advancement.' John Collins and the promotion of mathematical knowledge in Restoration England
- Rosanna Cretney (Oxford):
'Nor any Number can confine us:' The mathematical art of changes in early modern England
- Professor Robert Goulding (University of Notre Dame, USA):
Harriot's 1605 Colour Experiments
- Professor Niccolò Guicciardini (University of Bergamo, Italy):
Isaac Newton, Historian of Mathematics

- Professor Karen Parshall (University of Virginia, USA):

A Plurality of Algebras, 1200–1600: European Developments from Fibonacci to Clavius

- Professor Eleanor Robson (University College London):

Accounting and schooling in a Babylonian village, c.1600 BC

- Dr. Matthias Schemmel (Max-Planck-Institut für Wissenschaftsgeschichte, Berlin, Germany):

From forced to inertial motion: Thomas Harriot's integration of practical and theoretical knowledge on motion

- Professor Thomas Sonar (Technische Universität Braunschweig, Germany):

... in the darkest night that is ...: Briggs, Blundeville, Wright and the misconception of finding latitude

- Dr. Benjamin Wardhaugh (Oxford):
Communicating with France. British mathematics in the period of Charles Hutton (1737–1823)

There will be further short contributions from the following:

- Professor Norman Biggs:

More seventeenth-century networks

- Professor Maria Rosa Massa-Esteve:

The influence of Mengoli's mathematical ideas

- Dr Staffan Rodhe:

On Goldbach's recently found booklet on series

<http://www.bsh.m.ac.uk/events/mathematics-emerging-tribute-jackie-stedall-and-her-influence-history-mathematics>

4. Number Theory and its History

Saturday, 21 May 2016

Birkbeck College, London

Rewley House meeting

This year's event will trace the study of number theory from its ancient origins to the present day. We are lucky to have a really exciting group of speakers. They are:

- Simon Singh,
- Robin Wilson,
- Kevin Buzzard,
- Catherine Goldstein,
- Michalis Sialaros, and
- Ben Fairbairn.

<http://www.bsh.m.ac.uk/events/history-number-theory>

5. Mathematics in the Enlightenment

Saturday, 25 June 2016

Rewley House 1 Wellington Square Oxford OX1 2JA

This day will explore the mathematics of the Enlightenment (c.1650 – c.1800), a period also called the Age of Reason, in which mathematical thought and a belief in logic underpinned the European World view. While algebraic methods became dominant as a mathematical language during the period, mathematics was applied to a wide range of topics, such as architecture, the law, statistics and ship building in many different forms.

6. History of Mathematics in Education: An Anglo-Danish collaboration

Sunday, 21 August 2016 to Wednesday, 24 August 2016

Bath Spa University

7. ‘Mathematical Biography: A Celebration of MacTutor’

Friday, 23 September 2016 to Saturday, 24 September 2016
St. Andrews



HPM 2016
Mathematics in the Mediterranean

2016 Satellite Meeting of ICME 13

July 18 to 22, 2016
Montpellier, France

Aim and focus

HPM 2016 is the ninth quadrennial meeting of the International Study Group on the Relations Between the History and Pedagogy of Mathematics—the HPM Group.

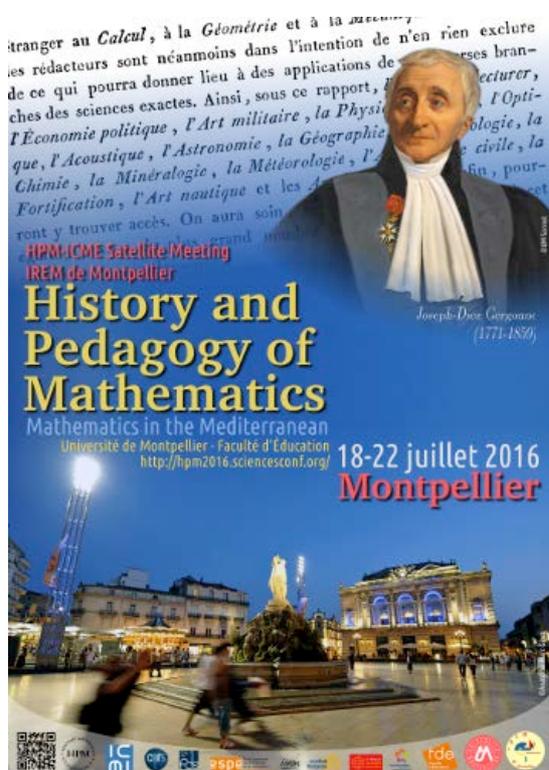
These quadrennial meetings are a major activity of HPM to bring together individuals with a keen interest in the relationship between the history of mathematics and mathematics education. They include:

- 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.

2. Main theme and topics

The theme of HPM 2016 is "Mathematics in the Mediterranean." The program and activities 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.
6. Topics in the history of mathematics education.
7. Mathematics in Mediterranean countries.



Activities during the 2016 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, discussion groups, workshops, parallel sessions where participants present research reports, poster exhibitions, and exhibitions of books and other didactical material.

Plenary sessions, discussion groups, and panels deal with the main topics of the conference. Plenary speakers, panelists, and coordinators of discussion groups are invited by the scientific committee.

We encourage you to make submissions for the following activities: workshops, research reports, poster exhibitions, and exhibitions of books and other didactical material.

Research reports are intended to communicate new research results. They take place in parallel sessions of 25-minute oral presentations followed by 5-minute discussions.

Workshops focus on the exchange of ideas and discussion among the participants around some historical or didactical material prepared beforehand by the workshop organizer. The material usually includes original historical texts, didactical material, students' worksheets, etc. Workshops can be one hour or two hours in duration.

Posters present summaries of ongoing or completed research, new ideas, etc.

Scientific program

Theme	Plenary	Panel
1. Theoretical and/or conceptual frameworks for integrating history in mathematics education.		Michael Fried (Israel), coordinator and speaker. David Guillemette (Canada), speaker. Niels Jahnke (Germany), speaker.
2. History and epistemology in students and teachers mathematics education: Classroom experiments and teaching materials.	Wang Xiaoqin (Shanghai)	
3. Original sources in the classroom and their educational effects.	Renaud Chorlay (France)	
4. Mathematics and its relation to science, technology, and the arts: Historical issues and interdisciplinary teaching and learning.	Costas Tzanakis (Greece)	

5. Cultures and mathematics.	Victor Katz (USA)	
6. Topics in the history of mathematics education.	Harm Jan Smid (Netherlands)	
7. Mathematics in Mediterranean countries.	Ahmed Djebbar (France)	Marc Moyon, Coordinator (France) Mahdi Abdeljaouad (Tunisia) Eva Caianiello (France and Italy)

Provisional planning is available
http://hpm2016.sciencesconf.org/conference/hpm2016/pages/Time_Schedule_v4.pdf

Titles of plenary talks:

- Les sources originales dans la salle de classe et leurs effets éducatifs

Renaud Chorlay, ESPÉ de l'académie de Paris, France

- Mathématiques dans les pays méditerranéens : La connexion Andalousienne et Maghrébinne

Ahmed Djebbar, Université de Lille, France

- The mathematical cultures of medieval Europe

Victor J. Katz, Professor Emeritus, University of the District of Columbia, Washington, DC, USA

• Formative years: Hans Freudenthal in prewar Amsterdam

Harm Jan Smid, Delft University of Technology, The Netherlands

• Mathematics and physics: An innermost relationship. Some didactical implications for their interdisciplinary teaching and learning

Constantinos Tzanakis, University of Crete, Greece

• L'intégration de l'histoire des mathématiques dans l'enseignement des mathématiques: quelques expériences en Chine

Wang Xiaojin, Shanghai, China

Time and place

The 2016 HPM Conference will be held from **July 18 to July 22, 2016** in **Montpellier, France**. Montpellier is a beautiful town, very famous for its culture and history.

The University of Montpellier, the host of the 2016 HPM Conference, is one of the oldest universities in the world, where Joseph D. Gergonne published in the early 19th century one of the oldest mathematical journals. Gergonne's portrait appears in the logo and the website banner of the Conference.

Registration fee

- *Early registration* (before April 15, 2016): 250 € (student or young researcher 150 €)
- *Regular registration* (between

April 15 and June 15, 2016): 300 € (student or young researcher 200 €)

- Registration after June 15, 2016, or at the conference: 350 €

The conference fee includes: 5 lunches, 9 coffee breaks, as well as the gala dinner on the seaside and an excursion.

Website

Follow us at:

<http://hpm2016.sciencesconf.org>

Contact

For further information, please contact:

- Luis Radford (Chair), lradford@laurentian.ca
- Fulvia Furinghetti (Co-chair), furinghetti@dima.unige.it
- Thomas Hausberger (Co-chair), thomas.hausberger@univ-montp2.fr
- Anne Cortella (Co-chair), anne.cortella@univ-montp2.fr

HPM is affiliated with ICMI (International Commission on Mathematical Instruction). HPM 2016 is a satellite meeting of the 2016 International Congress on Mathematical Education and is scheduled close to ICME.

Please note that the 13th International Congress on Mathematical Education (ICME-13) will take place right after HPM 2016, from July 24 to July 31, 2016 in Hamburg, Germany (see <http://www.icme13.org/>).

ICME-13 **International Congress on** **Mathematical Education**

24 – 31 July 2016
Hamburg, Germany



<http://icme13.org/home>

Topic Study Groups at ICME-13

A Topic Study Group (TSG) is designed to gather a group of congress participants who are interested in a particular topic in mathematics education. A TSG will serve as mini-conference and will display the progress of the discussion in the intervening years since ICME-12. Topic Study Groups will therefore promote the discussion of a variety of perspectives on the theme of the Group. The TSG will consist of high-standard discussions enabling the newcomer to get a broad overview on the state-of-the-art and allowing the experts to lead discussions at a high level. The team will provide the audience of their TSG not with a nationally framed insight into the strands of the discussion of the theme, but will give an overall overview on the international discussion as broadly as possible and allowing for insight into less

well-known strands of the discussion from under-represented countries. For ICME-13, the TSG is the major arena for participation. Participants are expected to associate themselves with one TSG and to stay in that group for all sessions.

TSG 24

History of the teaching and learning of mathematics

Co-chairs:

Fulvia Furinghetti (Italy)
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Alexander Karp (USA)
apk16@columbia.edu

Team members:

Henrike Allmendinger (Germany)
Harm Jan Smid (Netherlands)
Johan Prytz (Sweden)

IPC Liaison person: Alain Kuzniak (France)

TSG 25

The Role of History of Mathematics in Mathematics Education

Co-chairs:

Costas Tzanakis (Greece)
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Xiaoqin Wang (China)
xqwang@math.ecnu.edu.cn

Team members:

Kathleen Clark (USA)
Tinne Hoff Kjeldsen (Denmark)
Sebastian Schorcht (Germany)

IPC Liaison person: Alain Kuzniak (France)

HPM Administrative Structure

Chair:

Radford, Luis	École des sciences de l'éducation, Université Laurentienne, Sudbury, Ontario, Canada
----------------------	--

Executive Committee:

Barbin, Evelyne	Universite de Nantes, IREM-Centre Francois Viete, France
Furinghetti, Fulvia	Dipartimento di Matematica dell'Universita di Genova, Genova, Italy
Tzanakis, Constantinos	Department of Education, University of Crete, Rethymnon 74100, Greece

Advisory Board:

Bjarnadóttir, Kristín	University of Iceland, School of Education, Reykjavík, Iceland
Booker, George	Griffith University, Brisbane, Australia
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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.