HPM 2012
History and Pedagogy of Mathematics
The HPM Satellite Meeting of ICME-12

16-20 July 2012, Daejeon (Korea)

FIRST ANNOUNCEMENT

1. Aim and focus

The HPM 2012 is the eighth quadrennial meeting of the International Study Group on the Relations between the History and Pedagogy of Mathematics (the HPM Group), affiliated to ICMI. It is a satellite meeting of the corresponding ICME (International Congress on Mathematical Education) and is scheduled close to ICME. These quadrennial meetings are a major activity of HPM, to bring those together who are interested in the relation between the history of mathematics and mathematics education such as:

- Researchers in mathematics education, and its relation to the history of mathematics;
- Mathematics teachers at all levels who are eager to get insights on how the history of mathematics may be integrated into teaching and 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;
- All those with an interest in the history of mathematics and pedagogy.

2. Main themes

The HPM 2012 is a place where mathematicians, educators, historians, researchers and students can make presentations and participate in discussions. The programme and activities are structured around the following main seven themes:

1. Theoretical and/or conceptual frameworks for integrating history in mathematics education;
2. History and epistemology implemented in mathematics education: classroom experiments & 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 educational implications;
5. Cultures and mathematics;
6. Topics in the history of mathematics education;
7. Mathematics from Eastern Asia.

3. Activities during HPM 2012

During HPM 2012 there will be

- one-hour plenary lectures on each of the seven main themes
- two one-hour panel discussions
- parallel sessions of 25-minute oral presentations, followed by 5-minute discussions
- poster exhibitions with discussion sessions
- exhibitions of books and other didactical material

A limited number of 1-hour workshops may be included in the program upon special request to be further considered by the Organizers. In such cases, participants are actively participating in studying a specific subject and having a follow-up discussion. The role of the workshop organizer is to prepare, present and distribute the historical, or didactical material, which motivates and orients the exchange

of ideas and the discussion among the participants. Participants read and work on the basis of this material (e.g. original historical texts, didactical material, students' worksheets etc).

4. Invited speakers

Tinne Hoff Kjeldsen (Denmark): "Uses of history for the learning of and about mathematics: towards a theoretical framework for integrating history of mathematics in mathematics education."

Tsang-Yi Lin (Taiwan): "Using History of Mathematics in High School Classroom: Some Experiments in Taiwan. "

Janet Barnett (USA): "Bottled at the Source: The Design and Implementation of Classroom Projects for Learning Mathematics via Primary Historical Sources."

Dominique Tournès (France): "Mathematics of the 19th century engineers: methods and instruments ."

Ubiratan d'Ambrosio (Brazil): "Mind and Hand: the complexity and diversity of mathematics in different cultural environments."

Johan Prytz (Sweden): "Social structures in mathematics education. Researching the history of mathematics education with theories and methods from sociology of education."

Sung Sa Hong (Korea): "Theory of Equations in the history of Chosun Mathematics."

5. Time and place
HPM 2012 will be held from **Monday 16 July** to **Friday 20 July 2012** in **Daejeon, Korea**.

Sessions will be held on Monday, Tuesday, Thursday and Friday with a cultural tour on Wednesday.

ICME-12 will be held from **Monday 9 July** to **Sunday 15 July 2012** in **Seoul, Korea**. Its scientific program includes oral presentations and activities on the history and pedagogy on mathematics and on the history of mathematical teaching. It is planned that these activities will take place in the end of this meeting and that a special price for inscriptions will be granted to those who will participate to both ICME-12 and HPM 2012.

6. Official Languages
The official languages are English and Korean.
More specifically:

-All plenary talks and panel discussions will be in English with simultaneous translation if possible.

-Oral presentations will be given in either English, or Korean. For presentations in Korean a second set of transparencies should be, utilizing either two projectors and screens, or two power point computers.

7. Submission of proposals
ABSTRACTS
30 June 2011: **deadline** for submitting **Abstracts** of proposals for all types of activities.
31 August 2011: notification of acceptance or not of the submitted proposals.

Important: Please, use this Application Form and send it in electronic form both to

Evelyne BARBIN, Chair of HPM 2012
email: evelyne.barbin@wanadoo.fr
Sunwook HWANG, Co-chair
e-mail: shwang@ssu.ac.kr
Constantinos TZANAKIS, Co-chair
e-mail: tzanakis@edc.uoc.gr

The members of the Scientific Program Committee (SPC) will review the submitted abstracts. At this stage, acceptance of a proposal means that the proposed activity will be included in the HPM 2012 Scientific Programme. It is planned to have the proceedings ready at the meeting. For more details, see Proceedings.

8. The (international) *Scientific Program Committee* (SPC)
- Abraham Arcavi, Weizmann Institute of Science, Israel
- Evelyne Barbin, IREM-Centre François Viète, Université de Nantes, France
- George Booker, Griffith University, Brisbane, Australia
- Renaud Chorlay, IREM, University of Paris 7, France
- Ubiratan d'Ambrosio, Pontificia Universidade, Catolica de São Paulo, Brazil
- Carlos Correia de Sà, Departamento de Matemática Pura da Faculdade de Ciências da Universidade do Porto, Portugal
- Abdellah El Idrissi, Ecole Normal Supérieure, Morocco
- Florence Fasanelli, American Association for the Advancement of Science, USA
- Gail FitzSimons, Faculty of Education, Monash University, Australia
- Fulvia Furinghetti, Department of Mathematics, Universita di Genova, Italy
- Wann-Sheng Horng, National Taiwan Normal University, Taiwan
- Sunwook Hwang, Department of Mathematics, Soongsil University, Seoul, Korea
- Masami Isoda, Graduate School of Comprehensive Human Science, University of Tsukuba, Japan
- Niels Jahnke, Fachbereich Mathematik, Universität Duisburg-Essen, Germany
- Sten Kaijser, Department of Mathematics, University of Uppsala, Sweden
- Victor Katz, Department of Mathematics, University of the District of Columbia, USA
- Kathy Clark, Florida State University, Tallahassee, USA
- Manfred Kronfellner, Institut für Algebra & Computermathematik, Technische Universität Wien, Austria
- Ewa Lakoma, Institute of Mathematics, Military University of Technology, Warsaw, Poland
- Snezana Laurence, Bath Spa University, Bath, UK
- Luis Radford, Ecole des Sciences de l' Education, Laurentian University, Canada
- Tatiana Roque, Universidade Federale do Rio de Janeiro, Brazil
- Leo Rogers, Roehampton University, Digby Stuart College, Roehampton University, UK
- David Pengelley, New Mexico State University, Las Cruces, USA
- Gert Schubring, Institut für Didaktik der Mathematik, Universität Bielefeld, Germany
- Man Keung Siu, Department of Mathematics, University of Hong Kong, China
- Bjørn Smestad, Faculty of Education, Oslo University College, Norway
- Robert Stein, California State University, San Bernardino, USA
- Constantinos Tzanakis, Department of Education, University of Crete, Rethymnon, Greece
- Jankvist Uffe, Department of Science, Roskilde University, Denmark
- Jan van Maanen, Freudenthal Institute, University of Utrecht, The Netherlands
- Chris Weeks, Downeycroft, Virginstow Beaworthy, UK

The *Local Organizing Committee* (LOC)
- Sunwook Hwang. chair, Department of Mathematics, Soongsil University, Seoul, Korea.
- Sangki Choi. vice-chair, Department of Mathematics Education, Konkuk University, Seoul, Korea.
- Jinho Kim. secretary, Department of mathematics Education, Daegu National University of Education, Daegu, Korea.
- Sung Sook, Kim. Department of Applied Mathematics, Pai Chai University, Daejeon, Korea.

- Cheong-Soo Cho. Department of Mathematics Education, Yeungnam University, Kyungsan, Korea.
- Kyeonghye Han. Department of Mathematics, Soonchunhyang University, Asan, Korea.
- Wooseok Jang. Department of Mathematics, Sook Myung Girls' High School, Seoul, Korea.
- Sang Sook, Choi-Koh. Department of Mathematics Education, Dankook Univesity, Yongin, Korea.
- Youngmee Koh. Department of Mathematics, The University of Suwon, Suwon, Korea.

9. The web site

Making known the HPM 2012 in various countries is a major task to be realized by the SPC. To this end, a web site is available at **http://www.hpm2012.org**

This is going to be a very efficient tool to make known the HPM 2012 worldwide, allowing online registration etc.

10. Proceedings

Publishing the Proceedings of HPM 2012 is also a major task, and will be available in the meeting.

Each submitted full text for an oral presentation or a workshop will be reviewed by members of the SPC at the usual international standards.

More details on the size of the texts, the format guidelines will be announced in due course from the HPM 2012 and HPM websites, respectively;

http://www.hpm2012.org

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

FULL TEXTS

30 November 2011: **deadline** for submitting **full texts** for all types of activities.

31 January 2012: Notification of acceptance or not of the submitted texts.

11. Registration fee

Early registration (before 5 February 2012): 180$ (students 90$)

Late registration (From 6 February until 31 May 2012): 230$ (students 130$)

Registration after 31 may 2012, or on the spot: 270$ (students 160$)

12. Contact

For further information, please contact:

- Evelyne Barbin, evelyne.barbin@wanadoo.fr
- Sunwook Hwang, shwang@ssu.ac.kr
- Sangki Choi, schoi@konkuk.ac.kr
- Constantinos Tzanakis, tzanakis@edc.uoc.gr