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1998 July 13-18

Ivora, Portugal

The International Conference on Mathematical Logic in memory of A.A. Monteiro will take place at the Universidade de Ivora, Portugal, from July 13 to 18, 1998. Several invited mini-courses will be offered together with invited conferences and sessions for contributed papers. For more information see this newsletter page 4

1998 August 17-21

Chungbuk, Korea

The first ICMI-East Asia Regional Conference on Mathematics Education (ICMI-EARCOME 1) will be held at the Korea National University of Education, Republic of Korea, from August 17 through August 21, 1998. The themes of ICMI-EARCOME 1 are: Technology and Mathematics Education, Comparative Study on Mathematics Education, History and Pedagogy of Mathematics, Mathematics and Society, Mathematics Education in Primary School, Secondary School and University, Teacher Training, Gifted Education. The program will include Invited Lectures, working Groups and Topic Groups. In each Group, keynote speeches and paper presentations will be given. Abstracts and recommendations will also be proposed. Exhibitions of textbooks, computer softwares and other types of material are being planned as well. The conference languages will be English and Korean. But all oral presentations in Korean will be translated into English.

For more information about ICMI-EARCOME 1 please contact: Professor Hyunyoung Shin, Department of Mathematics Education, 363-791, Korea; tel: 82-431-230-3721; fax: 82-431-233-3256; e-mail: shin@knucc-sun.knu.ac.kr.

1998 August 18-27

Berlin, Germany

The International Congress of Mathematicians will this time take place in Berlin, Germany. There will be

Calendar

1998 April 2-4

Washington, U.S.A.

Spring Meeting of the NCTM. HPM will be conducting a Conference Within a Conference at an all day session on Saturday, April 4 at the Marriott Hotel across from the Convention Center. It is aimed at introducing more teachers to the use of history of mathematics in their classrooms. For more information see page 3 in this newsletter.

Invited Lectures in 19 sections, one of which is the History of Mathematics.

1999 May 30- June 4 **Manila, Philippines**
8th Southeast Conference on Mathematics Education (SEACME-8). The theme is; Mathematics for the 21st century. The conference will cover topics such as: Mathematics content in elementary, secondary and tertiary level schools; Teaching approaches and methods for the next century; Assessment Methods, Mathematics for special groups; Mathematics in the workplace; Educational technology; Alternate delivery systems; Mathematical modeling. The contact persons are Milagros Ibe, Chair and Catherine Vistro-Yu, Secretary. All proposals should be sent to: SEACME-8 Secretariat, Mathematics Department, Ateneo de Manila University, Loyola Heights, Quezon City 1108, P.O.Box 154, Manila 0917, Philippines. Information is also available on the web page <http://www.math.adm.Edu.Ph./seacme8/seacme.html>.

From the Chair
Jan van Maanen

Years with an even number celebrate large mathematical congresses, either the International Congress of Mathematicians (ICM) or the International Congress on Mathematical Education (ICME). This is the year of the ICM, which will be held at Berlin, from 18 to 27 August. The final sections in the programme are devoted to teaching (Section 18) and history (Section 19), but I have not been able to trace direct attention to the *Relation between History and Pedagogy of Mathematics*. No plenary lectures are announced for these fields, nor are there invited lectures which relate to HPM. Invited lectures in the history of mathematics will be given by Karine Chemla, Joseph Dauben and Jeremy Gray. For those who want to have the latest news; do consult the www-site of ICM98 <http://elib.zib.de/ICM98>.

The congress is surrounded by a large number of satellite meetings. An International Symposium on the History of Mathematics (ISHIM'98) is organized at Göttingen, from 10 to 14 August, by Hans J. Becker (Göttingen), David Rowe (Mainz) and Peter Ullrich (Münster). For further information, see <http://www.SUB.Uni-Goeettingen.de/~ishim98/>.

Just to emphasize how active the historical field is I review briefly the forthcoming meetings of the British Society for the History of Mathematics: a day about the History of Combinatorics (The Open University, Milton Keynes, Thursday 31 May 1998), a day about the History of Cryptography (Bletchley

Park, Milton Keynes, Saturday 20 June 1998, with a visit to the Colossus computer) and a day devoted to the History of Biomathematics and Biostatistics (Wellcome Institute, London, Friday 9 October 1998). Further details about these meetings can be found at <http://www.dcs.warwick.ac.uk/bshrm/meetings.html>

And for those who are more eastern-bound there is an international colloquium *Transmission and transformation of mathematical thought: a comparative approach* in Wuhan (P.R. China) from 4 to 8 October 1998. For information contact Deng Zongqi (zqdeng@ccnu.edu.cn) or read

<http://www.ccnu.edu.cn/mathconf>

Apart from the ICMI-Study Conference about *The role of the history of mathematics in the teaching and learning of mathematics*, which will be held in Luminy, near Marseille, from 20 to 25 Apr'l 1998 with 70 invited participants, there are only few meetings about HPM this spring and summer. The BSHM has a one day meeting about History in Mathematics Education (HIMED'98, the ninth in a series that started in 1990 in Leicester) on 7 April, but that is probably history when you are reading this. In the summer of 1999, however, there is the Third European Summer University *History and Epistemology in Mathematics Education*, in Louvain-la-Neuve and Louvain, Belgium, from 15 to 21 July 1999. An active team welcomes inscriptions and communications. The respective form can be found at

<http://ramses.umh.ac.be/noel/univete/Univeteeng.htm>

or, in French, at

<http://ramses.umh.ac.be/noel/univete/Univete.htm>

I hope, that after the summer universities in Montpellier and Braga this will be once again an enthusiastic, broad and inspiring conference. We can start working on it now.

Other spots of green that will turn into flowers soon are special HPM-issues of journals, which are being prepared by Niels Järlunke (*Mathematik lehren*) and John Earle (*Mathematics in School*, planned for September 1998). And a beautiful flower that came out already: the book *History of Mathematics, History of Problems* (Paris: ellipses, 1997; ISBN 2-7298-4730-8) by the French Inter-IREM Commission. It presents, in an English translation by Chris Weeks, a series of chapters which closely relate to HPM.

I have the feeling that I overlook various initiatives and activities. If that is the case I apologize, but then I am also happy that apparently there is more

than I can list. It proves that HPM is rich and surprising.

Conference in honor of Ubiratan D'Ambrosio
Victor Katz

Over eighty people from countries all around the world gathered at the Omni Hotel in Baltimore on January 6, 1998 to honor Ubiratan D'Ambrosio on his 65th birthday. Some twenty-five speakers dealt with issues related to Ubi's work in Ethnomathematics, the History of Mathematics, and Mathematics and the Search for Justice. It was clear from the talks that Ubi has had both a broad and a deep influence on mathematics education, since the range of topics, each of which was related to Ubi's work, was so wide. One of the speakers was Dirk Struik, still going strong at age 103, who spoke on *Ethnomathematics at the Beginning*. Among the other speakers were Bill Barton (New Zealand), *The Philosophical Background to D'Ambrosio's Conception of Ethnomathematics*; Geisa Knijnik (Brazil), *Ethnomathematics, the Politics of Knowledge, and Postmodernism*; Marcia Ascher (Ithaca College), *Mongolian Board Games*; Claudia Zaslavsky (New York), *Ethnomathematics in Alaska and Peace in the World*; Paulus Gerdes (Mozambique), *Ubiratan D'Ambrosio and Ethnomathematical Research in Mozambique*; John Fauvel (UK), *The Role of the History of Mathematics in Building a Democratic and Just Society*, and Reuben Hersh (New Mexico), *The Secret About the Hungarian Mathematics Miracle*. Other speakers included Diana Coben, Larry D'Antonio, Walter Sizer, Rebecca Berg, Nkechi Agwu, Alejandro Garcíadiego, Helena Pycior, Marilyn Frankenstein, Beatrice Lumpkin, Gloria Gilmer, Swapna Mukhopadhyay, Jose Segarra, Munir Fasheh, and Arthur Powell. At the festive birthday dinner in the evening, Jeremy Kilpatrick, Vice President of the International Commission on Mathematical Instruction, gave the toast and brought greetings from ICM. Kilpatrick, Alvin White, and Martin Hoffinan also made remarks during dinner. After he blew out the candles on his birthday cake and the guests sang the requisite "Happy Birthday", Ubi himself spoke movingly on how he felt about the gathering and his long career in mathematics education. The program of the conference was organized by Marilyn Frankenstein, Gloria Gilmer, Arthur Powell, and Victor J. Katz.

HPM Americas Section Meeting in Minneapolis
Schedule for Session #685 - CWA/C on The Use of History
in Teaching Mathematics
Victor Katz

8:30-9:00 *Plenary:*

Arthur Johnson - Why the History of Mathematics
Classes

Middle School Session:

9:10-10:30 Erica Voelch: Around the World on
Hamiltonian Paths and Circuits

10:40-12:00 Karen Dee Michalowicz: Using Ancient
Algorithms in Teaching Middle School Mathematics

High School Session:

9:10-10:30 Eleanor Robson: Old-Babylonian
Geometry in Today's Geometry Class

10:40-12:00 Don Barry: Using the History of
Mathematics as a Source of Problems for High School
Students

College Session:

9:10-10:00 Pat Allaire: Teaching Introductory
College Mathematics Through History

10:10-11:00 Fred Rickey: Using History in
Beginning Calculus

11:10-12:00 David Kullman: Precalculus Using
History

Chinese Mathematics Session:

1:30-2:50 Frank Swetz: The Yin and the Yang of
Chinese Mathematics

3:00-4:00 Philip Straffin: The Geometry of Liu Hui

African Mathematics Session:

1:30-2:50 Paulus Gerdes: Exploring Geometrical
Ideas from Southern Africa

3:00-4:00 Beatrice Lumpkin: Some Mathematical
Gems from Egypt

Art and Mathematics and the Mathematics of Islam.

1:30-2:50 Florence Fasanelli: The Use of the Intertwining of the History of Mathematics and the History of Art in the Classroom

3:00-4:00 Victor J. Katz: Algebra in Islam

Final Plenary:

4:10-4:50 Where Do We Go From Here? General Discussion

The Genealogy Project for Mathematicians
Harry Coonce

Aristotle is generally conceded to be the original scholar to define various subsets of intellectual inquiry. Indeed, as we all know, he not only distinguished among such basic areas as logic, metaphysics, epistemology and, natural philosophy, but he offered reasoned opinions in each of these areas. Now, I ask you, what credentials did Aristotle possess in order to publish so brazenly in so many areas? Well, the answer, of course, is: Aristotle had studied at "The Academy" (the very same academy which is the eponym for the milieu in which so many of us currently toil). Moreover, not only did Aristotle study at "The Academy", he studied under Plato. And who might Plato have been...? His credentials included the claim that he was a student of Socrates.

Moving forward a couple millenia such comments are still part of our world. Does one ever introduce Riemann without mentioning he was a student of Gauss or read about Albert W. Tucker without his relationship to Solomon Lefschetz being acknowledged? I suspect these occur seldom if ever. Understanding who studied under whom and who was a mentor of whom are essential components of intellectual history. Furthermore, in order to understand what Thomas S. Kuhn called "shifts in paradigms" it is frequently invaluable to know the academic heritage of the scholars involved. It is with these ideas in mind that the effort which we now call "The Genealogy Project for Mathematicians" was initiated.

We are trying to document the mentor-student relationship for as many current members of the mathematical community as we can. Moreover, we then try to find the advisors of the advisors. The recurrence is obvious. As we obtain this information we are making it available on the World Wide Web at the

following URL:

<http://hcoonce.math.mankato.nvus.edu>

As of March 15 we have approximately 10,000 names available through this web site. This is very much a work in progress, or in the language of the web: "The site is still under construction." It shall remain in that status in the foreseeable future. The long-term goal, however, is the following: A user requests a given mathematician. The response is a display which shows the pertinent data for that individual. E.g., name, the university granting the degree, the year and the title of the dissertation. Moreover, the advisor is indicated with a link to the corresponding page and each of the doctoral students of the selected mathematician is shown with a link to the corresponding pages.

This project may be comprable to a huge jigsaw puzzle where one does not have all the pieces in the beginning but, as time goes by, more and more pieces are obtained and new connections are established. We have, as of this month, several thousand pieces which have not yet been inserted into the big picture. However, more data is desperately needed. Please visit the web site and see if your Ph.D. school has furnished data for this project. If such is not the case, please try to help us obtain the records from that institution.

First announcement Logica 98 - International Conference on mathematical logic in memory of A. A. Monteiro
July 13-18, 1998, Ivora, Portugal

The International Conference on Mathematical Logic in memory of A.A. Monteiro will take place at the Universidade de Ivora, Portugal, from July 13 to 18, 1998.

A. A. Monteiro (1907-1980) was a leading figure in the so-called "mathematical movement" in the forties in Portugal, an excepcional organizer (co-founder of the Portuguese Mathematical Society and of two mathematical journals) who was forced to exile on political grounds by the dictatorship in 1945, first to Brasil and then to Argentina (Bahia-Blanca). Here he established himself as the founder of the logic school in Latin America, in the field of algebraic logic. The principle topic for the LOGICA98 meeting is an appraisal of the contributions of A.A. Monteiro and his many disciples in the field of Al-gebraic Logic, but other areas in Mathematical Logic and its applications,

such as Set Theory and Foundations, Model Theory, Computability, Nonclassical Logics and Nonstandard Mathematics are contemplated.

A few invited mini-courses are offered (titles to be announced), together with invited conferences and sessions for contributed papers.

The following logicians have been invited for mini-courses and conferences:

Luiz Monteiro (Universidad Nacional del Sur, Bahía-Blanca)

Roberto Cignoli (Universidad de Buenos Aires)

Carlos A. Di Prisco (Instituto Venezolano de Investigaciones Científicas, Caracas)

Jimena Llopis (Universidad Simón Bolívar, Caracas),

Robert Lutz (Université de Haute Alsace, Mulhouse),

Tewfik Sari (Université de Haute Alsace, Mulhouse),

Max Dickmann (CNRS, Paris).

For further information see the web page

<http://www.dmat.uevora.pt/logica98>. Book for accomodation early! For more information contact:

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8th SouthEast Asian Conference on Mathematics Education 30 May - 4 June 1999 Manila

MATHEMATICS for the 21st CENTURY

CALL FOR PAPERS

This is an announcement that we are still accepting proposals for presentations at the Conference. Research papers, demonstrations, reviews and project reports are welcome. Proposals for workshops and poster and materials exhibits are also accepted. The conference will cover topics such as:

mathematics content in elementary, secondary, and tertiary level schools

teaching approaches and methods for the next century

assessment methods

mathematics for special groups

mathematics in the workplace

educational technology

alternate delivery systems

mathematical modeling

All proposals should be sent to

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Milagros Ibe, Chair

International Symposium on the History of Mathematics

ISHIM '98, August 8 - August 14 1998

The ISHIM '98 will be held at the Georg August University of Göttingen, Germany. It is an ICM '98 Satellite Conference. The local organizing committee: Hans J. Becker, David Rowe and Peter Ullrich.

Proposed section themes up to now:

historiography of mathematics

genesis of mathematical ideas and methods

women and mathematics, organized

by Renate Tobies and Annette Vogt

humanities and mathematics

One focus of the Symposium will be the situation of mathematics in Germany from 1800, up to the present, organized by David Rowe, in particular:

mathematicians at Berlin, Göttingen, ...

mathematics, mathematicians, and the "Third Reich"

For further information please send an e-mail message to: becker@www.sub.uni-goettingen.de

Have You Read?

Ronald Calinger, ed.

This column seeks references from across the history and historiography of mathematics, the pedagogy of mathematics, and the sociology of mathematics. It also attempts to cite books or articles, containing sections on these subjects that have the potential for encouraging and motivating students, along with possibly improving the learning of mathematics and research in it, or that may enrich courses. Please send citations with complete bibliographic information to the section editor c/o Department of History, Catholic University of America, Washington, DC 20064, U.S.A.

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