HPM

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

No. 73   March 2010

Second announcement ESU 6

The second announcement for the ESU-6 conference is now available from
http://www.algebra.tuwien.ac.at/esu6
The conference will be held in Vienna, Austria 19-23 July 2010.

The programme and activities of ESU-6 are structured around the following main 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, considered from either the cognitive or/and affective points of view; surveys of curricula and textbooks;
3. Original sources in the classroom, and their educational effects;
4. History and epistemology as tools for an interdisciplinary approach in the teaching and learning of mathematics and the sciences;
5. Cultures and mathematics;
6. Topics in the history of mathematics education.

The plenary lectures will be:

Theme 1: Michael N. Fried, Ben Gurion University of the Negev (Israel): History of Mathematics in Mathematics Education: Problems and Prospects

Theme 2: Uffe Thomas Jankvist, Roskilde University (Denmark): An implementation of two historical modules: outcomes and perspectives

Theme 3: Michael Glaubitz, University Duisburg-Essen (Germany): The Use of Original Sources in The classroom - Empirical Research Findings

Theme 4 : Raffaele Pisano, University La Sapienza Roma (Italy): Which is the cultural and interdisciplinary role played by physical and mathematics sciences? Epistemological Reflections

Theme 5: Marc Moyon, IREM and University of Lille I (France): Practical Geometries in Islamic Countries: the Example of the Division of Plane Figures

Theme 6: Maria Koth, University of Vienna (Austria): On the historical development of mathematics curricula und final exams at Austrian secondary schools since 1850

The rest of the programme, which includes two panel discussions, 42 workshops and 53 oral presentations, is also available from
http://www.algebra.tuwien.ac.at/esu6

Conference reports

The editors welcome reports from conferences.

Work in progress

We encourage young researchers in fields related to *HPM* to send us a brief description of their work in progress or a brief description of their dissertation.
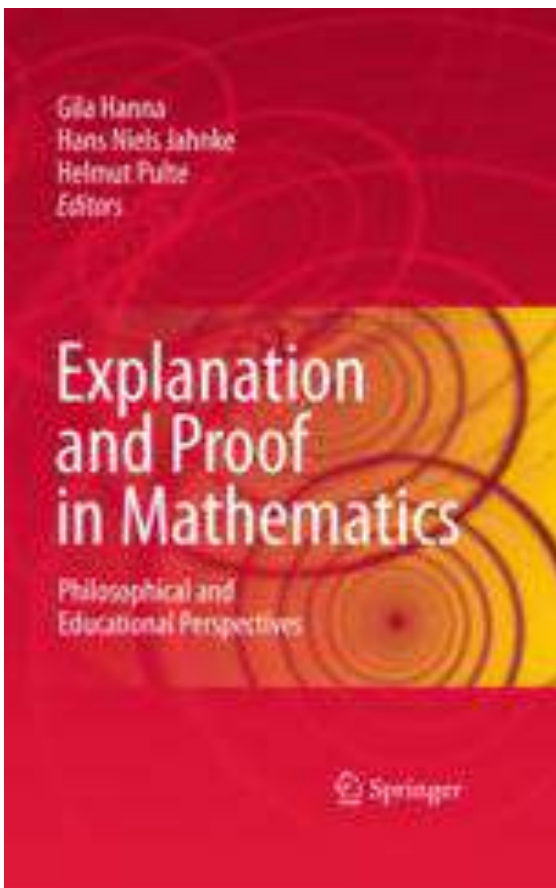
New Books

Explanation and Proof in Mathematics
Philosophical and Educational Perspectives
Hanna, Gila; Jahnke, Hans Niels; Pulte, Helmut (Eds.)
2010, VIII, 296 p., Hardcover

In the four decades since Imre Lakatos declared mathematics a "quasi-empirical science," increasing attention has been paid to the process of proof and argumentation in the field -- a development paralleled by the rise of computer technology and the mounting interest in the logical underpinnings of mathematics. *Explanantion and Proof in Mathematics* assembles perspectives from mathematics education and from the philosophy and history of mathematics to strengthen mutual awareness and share recent findings and advances in their interrelated fields. With examples ranging from the geometrists of the 17th century and ancient Chinese algorithms to cognitive psychology and current educational practice, contributors explore the role of refutation in generating proofs, the varied links between experiment and deduction, the use of diagrammatic thinking in addition to pure logic, and the uses of proof in mathematics education (including a critique of "authoritative" versus "authoritarian" teaching styles).

A sampling of the coverage:
- The conjoint origins of proof and theoretical physics in ancient Greece
- Proof as bearers of mathematical knowledge
- Bridging knowing and proving in mathematical reasoning
- The role of mathematics in long-term cognitive development of reasoning
- Proof as experiment in the work of Wittgenstein
- Relationships between mathematical proof, problem-solving, and explanation

Explanation and Proof in Mathematics is certain to attract a wide range of readers, including mathematicians, mathematics education professionals, researchers, students, and philosophers and historians of mathematics.

De grands défis mathématiques d'Euclide à Condorcet

[On major challenges in mathematics, from Euclid to Condorcet]
Evelyne Barbin (ed.), 180 pp., IREM, coéd. Adapt-Vuibert, January 2010
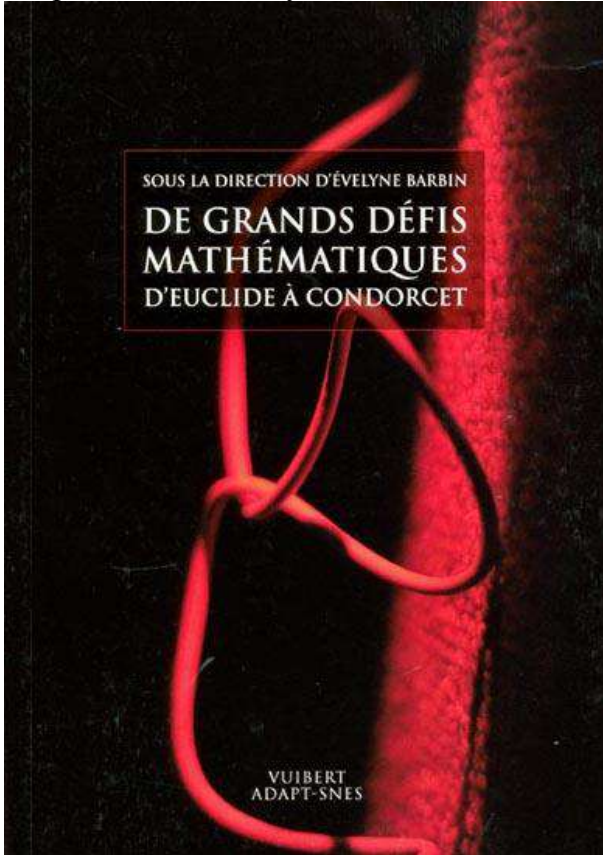
Cet ouvrage rassemble neuf expériences d'introduction d'une perspective historique dans l'enseignement des mathématiques, depuis le collège jusqu'à l'enseignement supérieur. Elles ont toutes pour point de départ des problèmes historiques. Les différents chapitres de l'ouvrage donnent l'occasion de croiser plusieurs époques et de lire des textes d'Euclide, d'Al-Khwarizmi, de Gottfried Leibniz, de Leonhard Euler ou du Marquis de Condorcet, en les resituant dans leurs contextes scientifiques et culturels.

Les auteurs sont des enseignants travaillant dans les Instituts de Recherche sur l'Enseignement des Mathématiques (IREM), qui font partager aux lecteurs leurs démarches et leurs réflexions.

This work is a collection of nine examples of introducing mathematics at upper secondary level from an historical point of view. They all begin with a particular problem in the history of mathematics. The different chapters span historical periods and offer a reading of texts by, among others, Euclid, al-Khwarizmi, Leibniz, Euler and Condorcet, set in their scientific and cultural contexts.

The authors are teachers associated with Institutes of Research into Mathematics Education.

- Jean-Paul Guichard, Introduction to angles in school: surveying and navigation
- Frédéric Laurent, Euclid in the upper secondary school
- Patrick Guyot, A square inside a triangle
- Evelyne Barbin, Numbers and diagrams
- Anne Boyé, From directed lines to vectors
- Renaud Chorlay, When Leibniz played dice
- Gérard Hamon, Probabilities of causes according to Condorcet
- Dominique Tournès, A graphical approach to Euler's method
- Loïc Le Corre, Bézier curves and typography

Reports on new books are welcome.

Have you read these?

Anderson, M, Wilson, R, and Katz, V J (2009), *Who gave you the epsilon?: and other tales of mathematical history*, Mathematical Association of America.

Barrow-Green, J. (2010). Euler as an Educator. *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, 25(1), 10-22.

Batterson, S (2009), Bocher, Osgood, and the ascendance of American mathematics at Harvard, *Notices of the American Mathematical Society*, 56, p. 916–930.

Beery, Janet (2009): Sums of Powers of Positive Integers. *Convergence* Volume 6.

Bjarnadóttir, K., Furinghetti, F., & Schubring, G. (eds.) (2009), *"Dig where you stand". Proceedings of the conference "On-going research in the History of Mathematics Education"*. Reykjavik: University of Iceland – School of Education. (A copy may be purchased by contacting the bookstore of the School of Education, University of Iceland, email address: boksala@khi.is. The price is IKR 2785, which by the current rate is 15,50 Euros. The mailing cost will be added. The bookstore will send an invoice.)

Bussi, Maria G. Bartolini, Daina Taimina and Masami Isoda (2010): Concrete models and dynamic instruments as early technology tools in classrooms at the dawn of ICMI: from Felix Klein to present applications in mathematics classrooms in different parts of the world. *ZDM* Volume 42, Number 1/February, p. 19-31.

Charalambous, C Y, Panaoura, A, and Philippou, G (2009), 'Using the history of mathematics to induce changes in preservice teachers' beliefs and attitudes: Insights from evaluating a teacher education program', *Educational Studies in Mathematics*, 71, 161–180.

Chorlay, Renaud (2010): From Problems to Structures: the Cousin Problems and the Emergence of the Sheaf Concept. *Archive for History of Exact Sciences* Volume 64, Number 1 p. 1-73.

Clark, Kathleen (2009): "In these numbers we use no fractions": A Classroom Module on Stevin's Decimal Numbers. Convergence Volume 6.

Cooper, Leon (2010): A new interpretation of Problem 10 of the Moscow Mathematical Papyrus. *Historia Mathematica* Volume 37, Issue 1, February 2010, Pages 11-27.

D D Craik, A. (2010). William Wallace's chorograph (1839): a rare mathematical instrument. *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, 25(1), 23-31.

Euclides (2009): Os elementos; tradução e introdução de Irineu Bicudo (ed.). (São Paulo: Editora UNESP). The first complete translation into Portuguese.

Gadanidis, George and Vince Geiger (2010): A social perspective on technology-enhanced mathematical learning: from collaboration to performance. *ZDM* Volume 42, Number 1/February, p. 91-104.

Gerdes, Paulus (2010): Exploration of technologies, emerging from African cultural practices, in mathematics (teacher) education. *ZDM* Volume 42, Number 1/February, p. 11-17.

Helfgott, Harald and Michel Helfgott (2009): A Modern Vision of the Work of Cardano and Ferrari on Quartics. *Convergence* Volume 6.

Howard, Christopher A.: Mathematics Problems from Ancient Egyptian Papyri. *Mathematics Teacher* December 2009, Volume 103, Issue 5.

Kidwell, Peggy Aldrich (2009): Computing devices, mathematics education and mathematics: Sexton's omnimetre in its time. *Historia Mathematica* Volume 36, Issue 4, November 2009, Pages 395-404.

Legendre, Adrien-Marie (2009), *Elementos de Geometria*. Reedição da primeira tradução brasileira de 1809, Luis Carlos Guimarães (org.) (Rio de Janeiro: Editora LIMC-UFRJ).

Malpangotto, Michela (2010): Graphical Choices and Geometrical Thought in the Transmission of Theodosius' Spherics from Antiquity to the Renaissance. *Archive for History of Exact Sciences* Volume 64, Number 1 p. 75-112.

Mayfield, Betty and Kimberly Tysdal (2009): A Locally Compact REU in the History of Mathematics: Involving Undergraduates in Research. *Convergence* Volume 6.

Ng, Wee Leng (2010): Effects of an Ancient Chinese Mathematics Enrichment Programme on Secondary School Students' Achievement in Mathematics. *International Journal of Science and Mathematics Education* Volume 8, Number 1/February, p. 25-50.

Parshall, K H (2009), 'Marshall Stone and the internationalization of the American mathematical research community', *Bulletin of*

the American Mathematical Society, 46, 459–484.
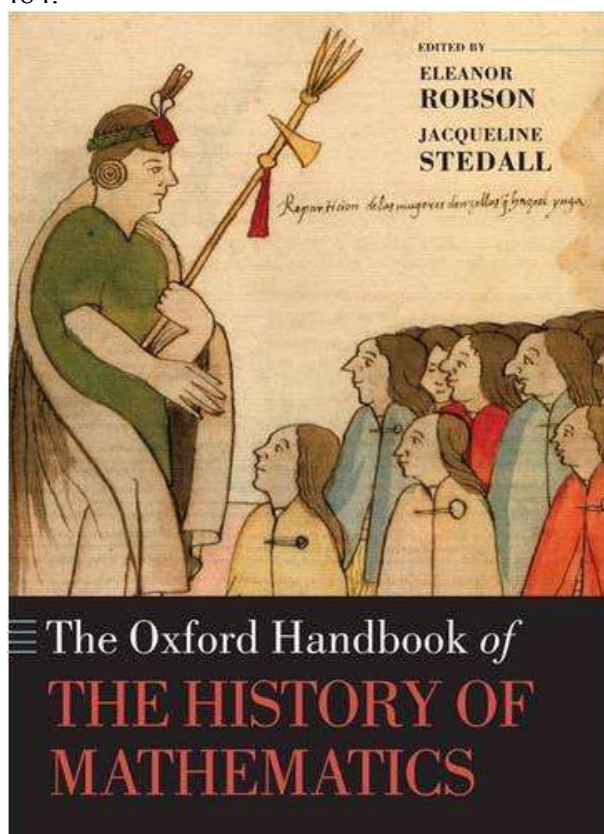
Robson, Eleanor and Jacqueline A. Stedall (eds.) (2009): *The Oxford handbook of the history of mathematics*. Oxford University Press.

Rocha, J F M (2009), 'The concept of field in the classroom: a historical-conceptual approach', *Revista Brasileira de Ensino de Fisica*, 31, art. no. 1604.

Schubring, Gert (2009), „A origem da geometria de Legendre e o seu impacto internacional", in: Adrien-Marie Legendre, *Elementos de Geometria*. Reedição da primeira tradução brasileira de 1809, Luis Carlos Guimarães (org.) Rio de Janeiro: Editora LIMC, 353-384.

Schubring, Gert (2009), „Hermann Günther Graßmann (1809–1877) - Ein vielseitiger Innovator", DMV-*Mitteilungen der Deutschen Mathematiker Vereinigung, 17: 3*, 181-189.

Schubring, Gert (2009), „The way from the combinatorial school to the reception of the Weierstrassian analysis", *Dalla pecia all'e-book. Libri per l'Università: stampa, editoria, circolazione e lettura. Atti del Convegno internazionale di studi, Bologna, 21-25 ottobre 2008*, a cura di Gian Paolo Brizzi, Maria Gioia Tavoni. Bologna: CLUEB, pp. 431-442.

Schubring, Gert (2010): *Die Debatten um einen Mathematik-Lehrplan an den Gymnasien in Westfalen 1834. Eine regionale Sozialgeschichte der Einführung von Mathematik als Hauptfach.* Münster: WTM-Verlag.

Schubring, Gert (2010): Historical comments on the use of technology and devices in ICMEs and ICMI. *ZDM* Volume 42, Number 1/February, p. 5-9.
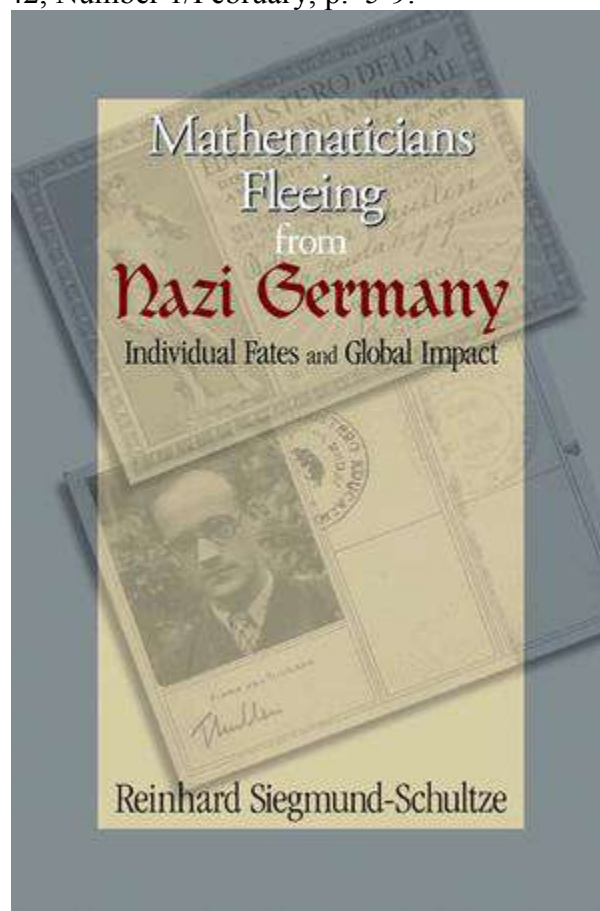
Siegmund-Schultze, Reinhard (2009): *Mathematicians Fleeing from Nazi Germany. Individual Fates and Global Impact*. Princeton and Oxford (Princeton University Press).

Stemkoski, Lee (2009): Investigating Euler's Polyhedral Formula Using Original Sources. *Convergence* Volume 6.

Thanailaki, P. (2010). Breaking social barriers: Florentia Fountoukli (1869–1915). *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, 25(1), 32-38.

van Brummelen, Glen (2010): Filling in the short blanks: musings on bringing the historiography of mathematics to the classroom. *BSHM Bulletin: Journal of the British Society for the History of Mathematics*, Volume 25, Issue 1 March, pages 2 – 9.

Villarreal, Mónica E. and Marcelo C. Borba (2010): Collectives of humans-with-media in mathematics education: notebooks, blackboards, calculators, computers and … notebooks throughout 100 years of ICMI. *ZDM* Volume 42, Number 1/February, p. 49-62.

Wisner, Robert J. (2009): The Classic Greek Ladder and Newton's Method. *Convergence* Volume 6.

Have you been here?

In this section we bring links related to the scope of the HPM from around the world. Please send suggestions.

New link(s) in this issue
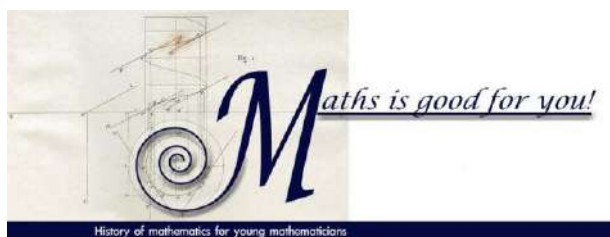
Maths is good for you!
http://www.mathsisgoodforyou.com/
With the heading 'History of mathematics for young mathematicians' Snezana Lawrence's very attractive website contains many suggestions for lesson starters and background information.
A list of resources on history of mathematics related to school in the Norwegian language
http://eleviki.wikidot.com/ressurser-om-matematikkhistorie-pa-norsk

Societies and organisations

Commission on the History of Mathematics in Africa (including newsletter)
http://www.math.buffalo.edu/mad/AMU/amuchma_online.html

Association des Professeurs de Mathematiques de l'Enseignement Public [APMEP] History site:
http://www.apmep.asso.fr/BMhist.html

British Society for the History of Mathematics [BSHM]
http://www.bshm.org

HOMSIGMAA - History of Mathematics Special Interest Group of the MAA
http://www.maa.org/sigmaa/hom

HPM Americas
http://www.hpm-americas.org/

Italian Society of History of Mathematics
http://www.dm.unito.it/sism/indexeng.html

Association pour la Recherche en Didactique des Mathématiques:
http://www.ardm.asso.fr/

Commission Française pour l'Enseignement des Mathématiques:
http://www.cfem.asso.fr/

Instituts de Recherche sur l'Enseignement des Mathématiques (IREM):
http://www.univ-irem.fr/

Canadian Society for History and Philosophy of Mathematics
http://www.cshpm.org

Brazilian Society for History of Mathematics
http://www.sbhmat.com.br
Nuncius Newsletter
http://brunelleschi.imss.fi.it/nuncius/inln.asp?c=5302

International History, Philosophy and Science Teaching Group

www.ihpst.org

Centre for the History of the Mathematical Sciences.
The Open University, UK
http://puremaths.open.ac.uk/pmd_research/CHMS/index.html

Oxford Museum of the History of Science
www.mhs.ox.ac.uk/exhibits/
http://www.mhs.ox.ac.uk/measurer/text/title.htm
http://www.mhs.ox.ac.uk/geometry/title.htm
http://www.mhs.ox.ac.uk/scienceislam/

Topics and Resources

MATHS for EUROPE: The history of some aspects of mathematics like: history of mathematical persons, symbols, algorithms...
http://mathsforeurope.digibel.be/index.html
http://mathsforeurope.digibel.be/list.htm
http://mathsforeurope.digibel.be/olvp.htm
http://mathsforeurope.digibel.be/olvp2.htm
http://mathsforeurope.digibel.be/olvp3.htm

Ethnomathematics on the Web
http://www.rpi.edu/%7Eeglash/isgem.dir/links.htm

About Medieval Arabic Numbers
http://www.geocities.com/rmlyra/Numbers.html
http://www.geocities.com/rmlyra/arabic.html

Annotated Bibliography on Proof in Mathematics Education
http://fcis.oise.utoronto.ca/~ghanna/educationabstracts.html

BibM@th
http://www.bibmath.net/dico/index.php3?action=rub&quoi=0
Centro Virtual de Divulgación de las Matemáticas, esta siendo desarrollada por la Comisión de Divulgación de la *Real Sociedad Matemática Española (R.S.M.E.)*
http://www.divulgamat.net/index.asp

Digitization of the oldest extant manuscript of Euclid's *Elements*
http://librarieswithoutwalls.org/bookviewer/

History of Statistics
http://www.stat.ucla.edu/history/

Images of Lobachevsky's context
http://www.ksu.ru/eng/museum/page0.htm

Images of Mathematicians on Postage Stamps
http://members.tripod.com/jeff560/index.html

Photos of Mathematicians
http://www.math.uni-hamburg.de/home/grothkopf/fotos/math-ges/

Numdam-Digitization of ancient mathematics documents
http://www.numdam.org/en/ressnum.php

The Montana Mathematics Enthusiast (journal)
http://www.montanamath.org/TMME/

Convergence: an online magazine of the MAA providing resources to teach mathematics through its history
http://convergence.mathdl.org/

International Journal for Mathematics Teaching and Learning,
http://www.cimt.plymouth.ac.uk/journal/default.htm

Homepage of International Journal for the History of Mathematics Education
http://www.tc.edu/centers/ijhmt/index.asp?Id=Journal+Home

Documents for the History of the teaching of mathematics in Italy
http://www.dm.unito.it/mathesis/documents.html

Ethnomathematics Digital Library
http://www.ethnomath.org/

Some Japanese Mathematical Landscapes:
The results of wandering in a beautiful
country, with a mathematical eye, aided by a
digital camera, by A. Arcavi
http://math.criced.tsukuba.ac.jp/museum/arcavi/arcavi_english/index.html

Wann-Sheng Horng's webpage
with HPM related materials in Chinese.
http://math.ntnu.edu.tw/~horng/

Fred Rickey's History of Mathematics Page
http://www.dean.usma.edu/math/people/rickey/hm/default.htm

Culture*MATH*. Ressources pour les
enseignants de Mathématiques
www.dma.ens.fr/culturemath/actu/livres.htm

The French INRP (National Institute for
Pedagogical Research) is developing a website
on questions related to mathematics teaching:
EducMath
http://educmath.inrp.fr

**Geometrical books and instruments from
15th to 18th century**
http://www.geometricum.com/

**David Henderson' s Home Page
[Educational and Historical Topics on
Geometry]**
http://www.math.cornell.edu/~dwh/

Homepage of Albrecht Heeffer
http://logica.ugent.be/albrecht/

Homepage of Jens Høyrup
http://www.akira.ruc.dk/~jensh/

L'Enseignement Mathématique, **Archive**
http://retro.seals.ch/digbib/vollist?UID=ensmat-001

Homepage of Prof. Leo Corry
http://www.tau.ac.il/~corry/

Opera Mathematica of Christoph Clavius
http://mathematics.library.nd.edu/clavius/

**Archimedes Project [Some famous
mathematical books of the Renaissance
period are available on line, i.e. Pacioli's
Summa]**
http://archimedes2.mpiwg-berlin.mpg.de/archimedes_templates

**Simon Stevin's *De Meetdaet* [The Practice
of Measuring]**
http://www.math.leidenuniv.nl/~wiskonst/meetdaet/index.html
and The Principal Works of Simon Stevin
http://www.historyofscience.nl/works_detail.cfm?RecordId=2702

Mathematicians Gallery
http://www.math.uconn.edu/MathLinks/mathematicians_gallery.php?Rendition=printerfriendly

History of Mathematics
http://www.otterbein.edu/resources/library/libpages/subject/mathhis.htm

**The Garden of Archimedes. A museum for
Mathematics**
http://web.math.unifi.it/archimede/archimede_NEW_inglese/

Mathematical instruments
http://brunelleschi.imss.fi.it/museum/esim.asp?c=500164
and
http://web.mat.bham.ac.uk/C.J.Sangwin/Sliderules/sliderules.html
and
http://www.mhs.ox.ac.uk/epact/catalogue.php?ENumber=52265

Homepage of Eleanor Robson
http://www.hps.cam.ac.uk/dept/robson.html

Flickr group for HPM related photos
http://www.flickr.com/groups/812621@N24/
Monuments on Mathematicians
http://www.w-volk.de/museum/exposi.htm

Video on the history of mathematics
http://www.youtube.com/watch?v=wo-6xLUVLTQ

We would like to provide a more comprehensive list of websites containing resources useful to researchers and students (not necessarily in English). If there are any you use, or you know are useful for students or researchers, please send your recommendations to the editors.

Notices

Convergence: Where Mathematics, History, and Teaching Interact

Convergence: Where Mathematics, History, and Teaching Interact, is the Mathematical Association of America's free online journal about the history of mathematics and its use in teaching. Now part of the Mathematics Digital Library (MathDL) and its online journal *Loci, Convergence* is aimed at teachers of both secondary and tertiary mathematics. Topics are from secondary and tertiary mathematics, with special emphasis on algebra, combinatorics, synthetic and analytic geometry, trigonometry, probability and statistics, elementary functions, calculus, differential equations, and linear algebra.

We encourage you to visit *Convergence* at http://mathdl.maa.org/mathDL/46/ to see what the journal has to offer. We especially encourage you to view the article "Mathematical Treasures" which features digital images of mathematical objects and texts from the Columbia University Library George Arthur Plimpton and David Eugene Smith collections.

At the *Convergence* homepage, you will also find links to:
- Problems from Another Time
- On This Day in mathematics history
- Calendar of upcoming mathematics history events

- Reviews of books, websites, and other instructional materials
- Our newest articles and classroom activities, along with indices to all six volumes (2004-2009) of *Convergence* (click on What's in Convergence?)

We invite you not only to read *Convergence* and use it in your classes, but also to submit for publication articles of the following types. For further details, please read "Guidelines for *Convergence* Authors" at the *Convergence* homepage.
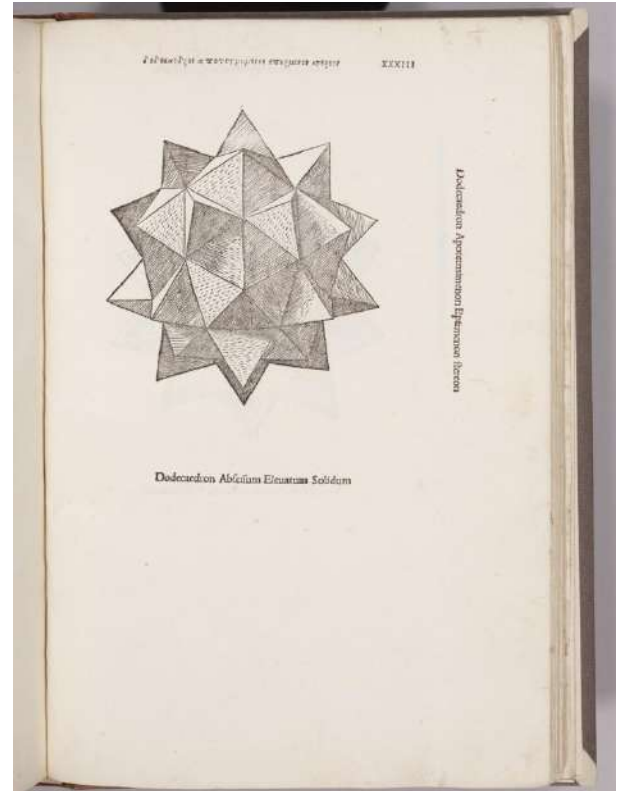
- Expository articles on the history of topics in the secondary and tertiary mathematics curriculum
- Translations of original sources appropriate for secondary and tertiary mathematics
- Classroom activities, projects, or modules for secondary and tertiary mathematics
- Classroom testimonials describing your experiences using a particular teaching aid, article, book, or website
- Reviews of books, articles, teaching aids, and websites
- Announcements of conferences and events for our Calendar

Finally, if you would be willing to serve as a referee for articles submitted to *Convergence*, please let one of the editors know what topics and types of articles you would prefer to review.

Convergence founding editors Victor Katz and Frank Swetz continue to serve the journal as advisors, as project directors for its National Science Foundation grant, and as authors of the ongoing "Mathematical Treasures" project. The journal's current editors are Janet Beery (janet_beery@redlands.edu) of the University of Redlands, California, and Kathy Clark (kclark@fsu.edu) of Florida State University.
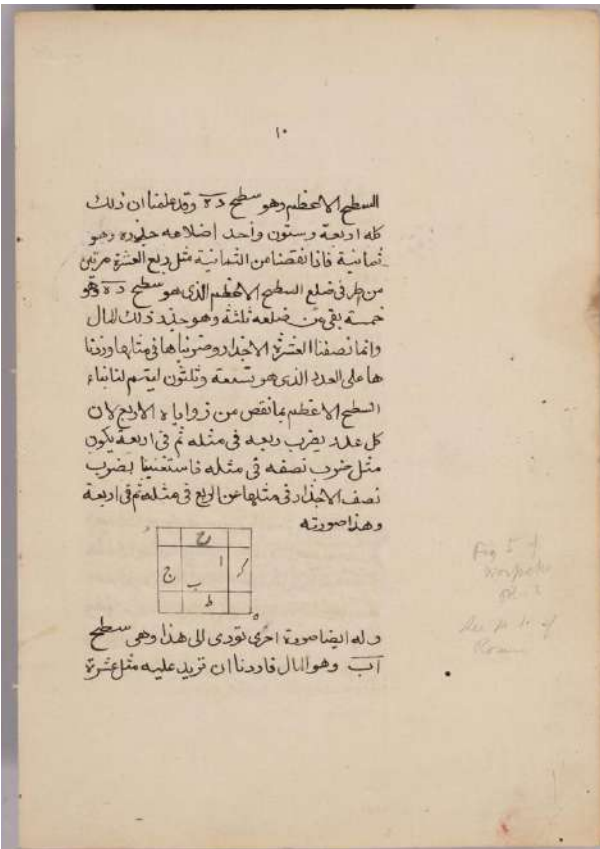
On this page from a 1650 manuscript copy of the *Lilavati,* Bhaskara II (1114-1185) presents a problem about an encounter between a peacock and a snake. (From "Mathematical Treasures", *Convergence,* courtesy of Columbia University Library)

On this page from the first known algebra text, *Kitab al-jabr wa l'muqabala,* Muhammad ibn Musa al-Khwarizmi (*c.* 825) solves a quadratic equation by completing the square. (From "Mathematical Treasures", *Convergence,* courtesy of Columbia University Library)

On this page from his *De Divina Proportione* (1509), Luca Pacioli (1445-1509) presents a stellated dodecahedron. (From "Mathematical Treasures", *Convergence,* courtesy of Columbia University Library)

Janet Beery, University of Redlands
Kathy Clark, Florida State University

Announcements of events

History and Pedagogy of Mathematics (HPM) Americas Section 2010 Annual Meeting

March 13-14, 2010
Washington, DC at the MAA Carriage House, 1781 Church Street NW, Washington, DC. HPM welcomes talks on the history of mathematics, the teaching of mathematics, and the history of the teaching of mathematics from all time periods and cultures. Prospective speakers should send a title and abstract, as well as their own contact information to Dave Roberts at robertsdl@aol.com by February 5, 2010. Talks will be 30-40 minutes long.

Registration prior to March 1 will be $70 ($35 for full-time graduate students) and include Saturday lunch. Registration after March 1 will be $5 higher. Registration checks should be made out to Amy Ackerberg-Hastings, Treasurer, HPM and mailed to:

    Amy Ackerberg-Hastings
    5908 Halsey Road
    Rockville, MD 20851

Additional information and updates will be available at the HPM web site

    www.hpm-americas.org

The History of Mathematics in the Undergraduate Curriculum

March 30, 2010
University of Greenwich, UK
A workshop organised jointly by the British Society for the History of Mathematics and the Higher Education Academy Maths, Stats and OR Network.

The history of mathematics is to be found in many parts of the undergraduate curriculum – from full modules to informal asides. This workshop will showcase the range of approaches used in British Universities and provide opportunity for informal discussion.

Histoire des mathématiques: héritages, transmissions, circulations: 18ème Colloque inter-IREM Épistémologie et Histoire des Mathématiques

Mai 28 et 29, 2010
IREM de Caen, France
Le thème du colloque concerne l'écriture et la lecture des mathématiques, les correspondances et les traités, les traductions et les appropriations, les héritages tus et revendiqués, l'isolement et la marginalisation, les transmissions inter-culturelles et ses freins, les nationalismes et les affrontements, les savoirs pérennes et les savoirs pour tous. Le programme du colloque comprendra une douzaine d'ateliers en deux séries d'ateliers en parallèle et une quinzaine d'exposés en trois séries en parallèle, ainsi que trois conférences plénières.

Conférences plénières
Les mathématiques en pays d'Islam : Des héritages anciens à l'appropriation

européenne (Ahmed Djebbar, Université de Lille I)

Sophie Kowalevski, une mathématicienne à deux idées.(Michèle Audin, Institut de Recherche Mathématique Avancée Université de Strasbourg)

La circulation mathématique dans et par les journaux savants des 17e et 18e siècles. (Jeanne Peiffer, CNRS Paris)

Renseignements pratiques, programme complet et inscriptions:
http://www.math.unicaen.fr/irem/colloque2010.html

10ème Colloque Maghrébin sur l'Histoire des Mathématiques Arabes

Mai 29- 31, 2010
Tunis

    Thèmes du colloque:
A. Mathématiques théoriques et Mathématiques appliquées
B. Mathématiques et astronomie
C. Histoire de l'enseignement des mathématiques arabes et circulation des mathématiques arabes.
D. Enseignement de l'histoire des mathématiques arabes.
E. Mathématiques et Société.

Langues du colloque: Les résumés et les interventions peuvent être présentés dans l'une des langues suivantes : Arabe, Français, Anglais.

Contact Mahdi Abdeljaouad, Colloque Maghrébin, ATSM, Boite Postale n°286 , Le Bardo 2000, Tunisie. Téléphone : 00216 97 55 97 39 mahdi.abdeljaouad@gmail.com

Si vous souhaitez présenter une communication au 10ème colloque maghrébin sur l'histoire des mathématiques arabes, veuillez compléter le formulaire (voir annonce 2) et nous l'envoyer avant le 1er mars 2010, à l'adresse : mahdi.abdeljaouad@gmail.com

10th Magreb Conference on the History of Arab Mathemtaics

May 29-31, 2010
Tunis

    Topics:
A. Pure and appllied mathematics
B. Mathematics and astronomy

C. History of teaching mathematics and diffusion of Arabic mathematics

D. Teaching of the history of Arabic mathematics

E. Mathematics and society

Languages: Abstracts and talks may be given in any one of Arabic, French or English.

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If you wish to present a communication please complete the form given in the second announcement and send before 1 March 2010 to: mahdi.abdeljaouad@gmail.com

Second announcement is at:
http://www.atsm-mahdia.net/index.php?option=com_content&view=article&id=288%3A10eme-colloque-maghrebin-sur-lhistoire-des-mathematiques-arabes&catid=22%3Anouveaute&Itemid=74&limitstart=1

ESU 6
July 19–23, 2010
Vienna, Austria
See article in this issue of the newsletter as well as the site:
http://bacchus.univie.ac.at/summeruniversity/index.php?id=2

11th International Conference of The Mathematics Education into the 21st Century Project: Turning Dreams into Reality: Transformations and Paradigm Shifts in Mathematics Education
September 10 – 16, 2011
Rhodes University, Grahamstown, South Africa

The Mathematics Education into the 21st Century Project has just completed its tenth successful international conference in Dresden, Germany, following conferences in Egypt, Jordan, Poland, Australia, Sicily, Czech Republic, Malaysia and the USA. Our project was founded in 1986 and is dedicated to the planning, writing and disseminating of innovative ideas and materials in Mathematics, Statistics, Science and Computer Education. The next conference is planned for September 10 – 16, 2011 in Grahamstown, South Africa. The chairman of the Local Organising Committee is Professor Marc Schafer of Rhodes University. The conference will open with an evening welcome reception on Sunday, Sep 10th and will close with lunch on Saturday, Sep 16th. Major sponsors will include Autograph.

The title of the conference is "***Turning Dreams into Reality: Transformations and Paradigm Shifts in Mathematics Education***". Paper proposals are now invited on all innovative aspects of mathematics, statistics, science and computer education. Our conferences are renowned for their friendly and productive working atmosphere. They are attended by innovative teachers and mathematics educators from all over the world, 44 countries were represented at our last conference for example.

There will be an additional full social programme for accompanying persons.

For ALL further conference details please email Alan Rogerson , Chairman of the International Programme Committee, at alan@rogerson.pol.pl

CERME 7
February 2011
Rzeszów, Poland
CERME is a Congress designed to foster a communicative spirit. It deliberately and distinctively moves away from research presentations by individuals towards collaborative group work. Its main feature is a number of thematic groups whose members will work together in a common research area. Researchers wishing to present a paper at the

Congress should submit the paper to one of these groups. In 2011, Working Group 12 (WG 12) will be on "History in Mathematics Education", organized by U. Th. Jankvist (Denmark, chair), S. Lawrence (UK), J. van Maanen (The Netherlands), C. Tzanakis (Greece).

ICME 12
July 8-15, 2012
Seoul, South Korea
http://www.icme12.org/

HPM 2012
July 16-20, 2012
Daejeon, South Korea

Photo from a meeting of some of the people responsible for the HPM 2012 (from left to right): Sunwook Hwang (chair of the Local Organising Committee (LOC), president of KSME), Jinho Kim (secretary of LOC), Evelyne Barbin (HPM AdB), Pamela Chae (Daejeon Convention Center), Sung Sook Kim (vice-president of KSME and member of LOC), Masami Isoda (HPM AdB), Chang Kyoon Park (president of KSHM and member of LOC), Sangki Choi (vice-chair of LOC).

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The views expressed in this Newsletter may not necessarily be those of the HPM Advisory Board.
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http://www.clab.edc.uoc.gr/hpm/

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74	12 June 2010	1 July 2010
75	12 October 2010	1 November 2010
76	12 February 2011	1 March 2011

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