

Past and Present in Mathematics: Notes from the CSHPM

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This is one of a series of columns in which the Canadian Society for History and Philosophy of Mathematics (CSHPM) shares scholarly work and enthusiasms in those areas with the wider mathematical community. The columns are written by members of the CSHPM and are edited by Amy Ackerberg-Hastings and Hardy Grant. Comments are welcome and may be addressed to either of the editors at aackerbe@verizon.net or hardygrant@yahoo.com.

The Kenneth O. May Prize is awarded every four years to a historian or historians in recognition of distinguished contributions to the history of mathematics. The Prize is administered by the International Commission for the History of Mathematics and awarded on the occasion of the International Congress for History of Science, Technology and Medicine, held every four years. The ICHM is a member commission of the International Union for History and Philosophy of Science and Technology and the International Union of Mathematics.

Kenneth Ownsworth May (1915-1977) was an American mathematician and historian of mathematics who spent the last ten years of his career at the University of Toronto. He founded the International Commission for the History of Mathematics, the Canadian Society for History and Philosophy of Mathematics, and the journal *Historia Mathematica*. In addition to his work in the history of mathematics he also made pioneering contributions to the field of computer information retrieval and to mathematics education. May was the author of *Elements of Modern Mathematics* (Reading, Mass.: Addison-Wesley, 1959) and *Bibliography and Research Manual of the History of Mathematics* (Toronto: University of Toronto Press, 1973). He wrote the article on Carl Friedrich Gauss for the *Dictionary of Scientific Biography*.

The first May prize was awarded in 1989; to date there have been 12 winners. The recipient of the Prize also receives the May Medal, a bronze medallion cast from a design created by the Canadian sculptor Salius Jaskus. A full list of past winners and citations for these awards may be found on the website of the ICHM (<http://www.unizar.es/ichm/mayprize.htm>).

The 24th ICHSTM was held in Manchester, UK in July of 2013. The two winners of the May Prize for 2013 are Menso Folkerts and Jens Høyrup. The Prize was presented to them by Craig Fraser, chair of the ICHM.

Menso Folkerts is a German historian of mathematics, born in 1943 and a retired professor at Ludwig-Maximilians-Universität in Munich. He has made extensive contributions to the history of medieval and early modern mathematics, and has also written on other areas of the history of mathematics. Folkerts has played a major role in making primary historical sources available for study to scholars. His leading contribution in this respect is the *Jordanus* catalogue

(<http://archimedes.mpiwg-berlin.mpg.de/iccsm.html>). Started by Folkerts within the Munich Department for the History of Science, and then since 1997 a joint initiative with the Berlin Max Planck Institute for the History of Science, *Jordanus* is now an open access on-line catalogue listing more than 13,000 mathematical and scientific manuscripts in Latin and Western European vernacular languages produced between the years 500 and 1500 (but also including numerous entries from later centuries). Folkerts's second major contribution to making primary sources available to historians of science is a database of Gauss's correspondence cataloguing more than 7,600 letters—also available as an on-line catalogue.

Folkerts has served as an executive officer of the International Commission for the History of Mathematics, on the Board of Trustees of the Deutsche Museum, and as President of the German Society for the History of Medicine, Science and Technology. He has edited or helped to edit over 12 scholarly journals and book series, including *Boethius* and *Algorismus*. His distinguished service to the community and influential scholarship has been acknowledged with membership in the International Academy for the History of Science (since 1981, corresponding member, and 1986, effective member); the Leopoldina Academy (Deutsche Akademie für Naturforscher, since 1989); the Saxonian Academy of Science (corresponding member since 1998); and the Bavarian Academy of Science (since 1999).

Jens Høyrup is a Danish historian of mathematical science, born in 1943 and a retired professor at Roskilde University. He has worked on several different parts of the history of mathematics but is best known for his contributions to the study of Babylonian mathematics from the period 1800-1500 BC. His major work on this subject is the book *Lengths, Widths, Surfaces: a Portrait of Old Babylonian Algebra and Its Kin* (Springer 2002). From the citation read on the occasion of the awarding of the prize:

Høyrup has pioneered new approaches to the study of Babylonian mathematics which have had an impact beyond the small world of ancient Near Eastern specialists. His method is essentially discourse analysis: taking the technical terminology of Old Babylonian algebra at face value and relating it back to its non-technical meanings in everyday discourse. In this way he has demonstrated incontrovertibly that in the 18th century BC unknowns were conceptualised as having dimension as well as number: algebra was a matter of manipulating lines, areas and volumes in a conceptually very concrete manner. Through close reading of the terminology he has shown that the ancient texts distinguished four different types of multiplication, two different types of addition, and so on.

Høyrup is a member of the International Academy of the History of Science, an associate editor of *Historia Mathematica* and member of the editorial board of *Revue d'Histoire des Mathématiques*. He is a regular reviewer for several journals and publishers in the history of mathematics. He has published approximately thirteen books as author or co-author, about sixty articles in journals, about forty

articles in conference proceedings and other books, and several contributions in encyclopaedic works.

For the full citations that accompanied the awarding of the May Prize to Professors Folkerts and Høyrup see Craig Fraser, "Awarding of the May Prizes for 2013," *Historia Mathematica* 40 (2013): 353–356.

The next Kenneth O. May Medal and Prize will be awarded in 2017 at the 25th International Congress of History of Science, Technology and Medicine in Rio de Janeiro (Brazil).

Biography

Craig Fraser is Director of the Institute for History and Philosophy of Science and Technology of the University of Toronto, where he teaches undergraduate and graduate courses on the history of mathematics and astronomy. From 2009 he has been chair of the International Commission for the History of Mathematics. His research fields are the history of analysis, mathematical mechanics and the foundations of mathematics, with emphasis on the eighteenth and nineteenth centuries.



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- 18-19** AMS Regional Meeting (*Halifax, NS*) www.ams.org/amsmtg/sectional.html
- 19-24** Dynamics and C*-Algebras: Amenability and Soficity <http://www.birs.ca/events/2014/5-day-workshops/14w5161>
- 26-31** Biological and Bio-Inspired Information Theory (14w5170) <http://www.birs.ca/events/2014/5-day-workshops/14w5170>
- 27-29** Quantum Optimization Workshop (*Fields Institute*) <http://www.fields.utoronto.ca/programs/scientific/14-15/quantumopt/>
- 29-31** 2014 International Methodology Symposium (*Palais des congrès de Gatineau, Gatineau, QC*) <http://www.statcan.gc.ca/conferences/symposium2014/index-eng.htm>

NOVEMBER 2014

- 1-5** 38th Australasian Conference on Combinatorial Mathematics and Combinatorial Computing (*Wellington, New Zealand*) msor.victoria.ac.nz/Events/38ACCMCC
- 2-7** Geometric Scattering Theory and Applications <http://www.birs.ca/events/2014/5-day-workshops/14w5105>
- 3** The Nathan and Beatrice Keyfitz Lectures in Mathematics and the Social Sciences (*Paul Milgrom (Stanford University) Fields Institute*) http://www.fields.utoronto.ca/programs/scientific/keyfitz_lectures/
- 6** Canadian Open Mathematics Challenge <http://cms.math.ca/Competitions/COMC/2014/>
- 7-8** Workshop on Statistical Issues in Biomarker and Drug Co-development (*Fields Institute, Toronto*) <http://www.fields.utoronto.ca/programs/scientific/14-15/biomarker/>
- 9-14** Particle-Based Stochastic Reaction-Diffusion Models in Biology (14w5103) <http://www.birs.ca/events/2014/5-day-workshops/14w5103>
- 14** Hugh C. Morris Lecture: Cedric Villani (*University of Lyon & Institut Henri Poincaré*) *University of Victoria*
- 15** Workshop on Kinetic Theory and Related Topics (*University of Victoria*)
- 16-21** Algorithms for Linear Groups (14w5031) <http://www.birs.ca/events/2014/5-day-workshops/14w5031>
- 17-20** Fields Medal Symposium (*Fields Institute, Toronto, ON*) <http://www.fields.utoronto.ca/programs/scientific/fieldsmedalsym/>
- 17-21** Categorical Structures in Harmonic Analysis (*MSRI, CA*) <http://www.msri.org/workshoops/708>
- 23-28** Algebraic and Model Theoretical Methods in Constraint Satisfaction <http://www.birs.ca/events/2014/5-day-workshops/14w5136>
- 24-28** Conference "The Legacy of Vladimir Arnold" (*Fields Institute, Toronto, ON*) <http://www.fields.utoronto.ca/programs/scientific/14-15/arnoldconf/>
- 30-Dec 5** Families of Automorphic Forms and the Trace Formula (HALF) <http://www.birs.ca/events/2014/5-day-workshops/14w5120>

DECEMBER 2014

- 5-8** CMS Winter Meeting (*Hamilton, ON*) <http://www.cms.math.ca/events/summer14>