

## News and Notices

**Awarding of the May Prizes for 2013**

Craig Fraser (Chair, ICHM)

Available online 18 October 2013

The International Commission for the History of Mathematics (ICHM) awards the May Prize every four years to coincide with the International Congress for the History of Science, Technology and Medicine (ICHSTM). The May Prize is given for outstanding contributions to the history of mathematics.

In the year preceding the ICHSTM, the Executive Committee of the ICHM forms a committee consisting of the Chair of the EC and three internationally recognised historians of mathematics to consider the candidates for the May Prize(s). That committee, after giving careful consideration to the full range of historical scholarship in the history of mathematics internationally, draws up a short list of no more than three candidates and makes a report to the EC for its consideration and vote. The EC and ICHM national members may make suggestions for consideration by the committee to the Chair. The Chair announces by a general email to the ICHM national members when May Prize deliberations will begin in order to give them time to offer suggestions for candidates.

The committee's report consists of reasoned arguments (including solid evidence of scholarly achievement such as books and significant articles published) for the selection of each candidate.

The EC then takes a confidential vote on the basis of the committee's recommendations.

The ICHM is proud to award the May Prize for 2013 to Menso Folkerts and to Jens Høyrup. The Prizes were conferred at the open meeting of the ICHM at the 24th ICHSTM in Manchester in July of 2013. The citations which follow outline the careers of the two winners and document their contributions to the history of mathematics. (The selection committee is grateful to Antoni Malet and Eleanor Robson for their assistance in the preparation of these citations.)

**Citation for Menso Folkerts**

Menso Folkerts studied classics and mathematics at the University of Göttingen between 1962 and 1967, in which year he earned his Ph.D. His dissertation is a critical edition of an eleventh-century compilation of geometry and the reconstruction of Boethius's translation of Euclid's *Elements*. It was to become his first book (1970) and required reading for anyone venturing into medieval Latin mathematics. In these early years of his career he benefited from the guidance of extraordinary mentors, Kurt Vogel, Joseph E. Hofmann, and Christoph J. Scriba. From 1969 to 1975 he was research assistant at the Institute for the History of Exact Sciences and Technology of the Technische Universität Berlin. In 1976, Folkerts was appointed professor of mathematics and history of mathematics at the University of Oldenburg. In 1980 he was made Professor of History of Science at the Ludwig-Maximilians-Universität in Munich and Director of the Department for the History of Science, positions he held until his retirement in 2008.



Menso Folkerts and Jens Høyrup after their acceptance speeches at the 24th International Congress of the History of Science, Technology, and Medicine, Manchester

In Oldenburg Folkerts set about collecting more than five thousand copies of European medieval mathematical manuscripts. Before the internet and digital era, this was an essential source for the study of medieval mathematics and the reception of the Greek, Roman and Islamic mathematical heritage in the Renaissance. The collection of medieval manuscripts he created in Oldenburg became the basis for the *Jordanus* catalogue. 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 7600 letters—also available as an on-line catalogue.

Folkerts's scholarship has focused mostly (but by no means exclusively) on medieval Latin mathematics. He is the author of many essays and articles dealing with almost all facets of this subject. He studied, for instance, the transmission of the collections of the so-called recreational problems, wherein he produced a critical edition of Alcuin's *Problems to Sharpen the Young* and also (in collaboration with Arno Borst) an edition of a very early text presenting rithmomachy, the popular medieval board game. In collaboration with Hans Busard, he edited the so-called Adelard II version of Euclid's *Elements*, which was the basis of the Campanus edition, the most popular Latin version of the *Elements* to circulate in Europe in the High Middle Ages. He also prepared a critical edition of the Latin translation of one of the oldest Arabic texts dealing with computation of Hindu-Arabic numerals. He is the author of one of the earliest studies on medieval mathematical rules for barrel gauging. More recently he has been interested in Regiomontanus's legacy and has edited the mathematical works of Nicholas of Cusa. He is an editor of the German edition of Copernicus's works and a member of the commission in charge of editing Kepler's works. Also noteworthy are his work on 19th- and 20th-century topics such as Gauss's institutional role in the University of Göttingen, and the relations between the historians of mathematics Kurt Vogel and A.P. Yushkevich.

Folkerts has served the community of historians of mathematics in many ways, including his work with the International Commission for the History of Mathematics, his membership on the Board of Trustees of the Deutsches Museum, and his Presidency of the German Society for the History of Medicine, Science and Technology. He has edited or helped to edit over a 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 der Naturforscher, since 1989); the Saxonian Academy of Science (corresponding member since 1998); and the Bavarian Academy of Science (since 1999).

### Citation for Jens Høyrup

Jens Høyrup studied physics and mathematics at the Niels Bohr Institute of the University of Copenhagen and at the Institut Henri Poincaré of Paris University. From 1971 till 1973 he was assistant lecturer at the Danish Academy for Engineering, where he taught courses in physics. In 1973 he became senior lecturer and in 1989 reader at Roskilde University. He began in the Department of Social Sciences and later moved to the Section for Philosophy and Science Studies. In 2008–2009 Høyrup held the Sarton chair in the history of science at Ghent University. Following his retirement in 2005 he has remained extremely active in research and publication.

Høyrup has worked and written on various topics covering a wide range of periods, from the earliest history of mathematics to modern mathematics and from technical aspects to cultural contexts and their implications. Among his many contributions, particular note should be made of his work on Babylonian mathematics. 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. This insight, first published in a series of articles, received its fullest expression in his book *Lengths, Widths, Surfaces: a Portrait of Old Babylonian Algebra and Its Kin* (Springer, 2002).

That book also contained more than a lexical analysis of Old Babylonian algebra. Høyrup has extended its reach in several directions. Going deeper into scribal writing habits, he has revived and extended Albrecht Goetze's pioneering orthographic analysis of cuneiform from the 1940s, to help date and locate more precisely the large numbers of unprovenanced Babylonian mathematical tablets which had reached western museums through the then unregulated market in the early 20th century. He has been able to suggest routes of transmission for mathematical knowledge, as spelling habits tended to track lines of communication. That led him into two further, much larger areas of investigation: the social world of Babylonian mathematics and equally its place within the mathematical traditions of the Old World, from silk route merchant riddles to classical Greek formalism, to the abacus school of medieval Italy.

Jens Høyrup is a member of the International Academy of the History of Science, is 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. Long before the internet made preprint culture common, he widely shared his work in progress and was always genuinely delighted on the rare occasions one found a slight argumentative weakness or minor factual error. He has

been a supportive mentor to younger colleagues while maintaining an impressive output of his own, at a rate which seems to increase year on year.