

SAW Conference on Writing histories of ancient mathematics – Reflecting on past practices and opening the future, 18th-21st centuries

24-28 Octobre, 2016

organized by Karine Chemla, Agathe Keller, Christine Proust and the SAW group
Université Paris Diderot, Condorcet Building room 366A Klimt- 9:30 am to 5:30 pm

Varieties of mathematical knowledge and practices used to read ancient texts

Tuesday October 25th, 2016

Chaigneau, Pierre (ERC Project SAW & SPHERE - CNRS & Université Paris
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*On formulas for computing both the volume of a truncated pyramid and the
circumference of hermeneutic circles*

Abstract – If translating ancient mathematical texts into a sequence of modern algebraic formulas can no longer be assumed to be a transparent operation, isn't it precisely because such operation conveys special information on the resources and beliefs engaged by a commentator when reading an ancient text in this way? In this talk we account for a first step undertaken in order to circumvent how special and rich this information can be for historiographical investigations. What is the meaning behind a particular choice of symbols and algebraic expressions in order to account for the so-called "mathematical content" of an ancient text? Is a formula at the beginning or at the end of the interpretation process? How various types of formulas given by commentators can be correlated with what they actually say about the ancient text? Such issues are addressed through the study of a small group of commentaries from the 1930's all focused on a particular mathematical Old Babylonian problem dealing with the volume of a truncated pyramid.