

## **Seminar SAW**

### **Seminar Exploring 19th and 20th centuries historiographies of mathematics in the ancient world 2015-2016**

organized by  
Karine Chemla, Matthieu Husson, Agathe Keller, Christine Proust and the SAW group

**Université Paris Diderot, Condorcet Building**  
**room 483A**  
**9:30 am to 5:30 pm**

<http://sawerc.hypotheses.org/seminars/internal-seminar-historiography-2015>

### **Programme**

#### **January 8<sup>th</sup>, 2016 – Historiography of ancient mathematics and astral sciences in India before its professionalization**

**Presentation** – Here, we wish to explore diverse aspects of how the history of mathematics in the Indian subcontinent was written before its institutionnalisation and professionnalisation in the middle of the 20th century. Who were the actors in the 19th and early 20th century who found sources and made them available? How did they edit and translate such sources? How did they have them published? Were they guided by specific ideas of what a mathematical text, or an old Indian text should be? Who read and commented on these newly available sources? How were they commented upon? With what questions or issues were such sources read and interpreted? How were they integrated in wider reflections on the history of mathematics or on mathematics itself? What conceptions of proofs, quantities, algebra, series, geometrical objects etc. were dealt with when confronted with these texts? These are some of the questions that we hope to raise, specify and discuss.

## Speakers

**Ivahn Smadja**, *Crossing Borders: Henry Thomas Colebrooke and his European readers*

**Kevin Lambert**, *Counting on Power: George Peacock, the History of Arithmetic and the Late Georgian British Colonial State*

**Agathe Keller & Catherine Singh**, *Editions and translations of Sanskrit Mathematical and Astral texts in India at the beginning of the twentieth century*

**Ivahn Smadja** (SAW project, Université Paris Diderot)

*Crossing Borders: Henry Thomas Colebrooke and his European readers*

**Abstract** – This contribution will attempt to analyze the reception of the pioneering work by Henry Thomas Colebrooke (1765-1837) on ancient Sanskrit mathematical sources, in nineteenth-century France and Germany. Who read Colebrooke? And how? While pursuing which agendas? Did crossing borders change the way Colebrooke's scholarship was approached? Did it prompt new questions and inquiries? Did crossing boundaries between disciplines or scholarly practices change the prism through which Colebrooke's work was read? By putting the emphasis on the complex dynamics of cultural transfers involved in that multifaceted reception, I will provide an overview of the various actors who played a significant part in this story and the distinctive contexts in which they happened to operate. I will attempt to characterize the main differences – if any – between the French and German receptions of Colebrooke, by analyzing how philology and mathematics interacted in a specific way in Germany, in contrast to what occurred in France. However, as will be shown, questions and concerns nonetheless migrated from the French to the German context.

**Kevin Lambert** (Fullerton college, California)

*Counting on Power: George Peacock, the History of Arithmetic and the Late Georgian British Colonial State*

**Abstract** – In this paper, I will explore Cambridge mathematician George Peacock's history of arithmetic in terms of particular ways of classifying, mapping, and displaying knowledge that also served as justifications for the nineteenth-century British colonial state. As Peacock began his work on his history of arithmetic in the 1820s, Cambridge University was becoming an example of what Bruno Latour has called a center of calculation; a central node in an information network in which various kinds of reports, maps, and objects were collected and translated into a regime of scientific knowledge. East India Company officers such as Henry Thomas Colebrooke provided important resources that Peacock would use to construct a world history of arithmetic that situated counting practices from a variety of times and places around the world into a progressive history culminating in European symbolic algebra. By describing how and why Cambridge became a center for the exchange of knowledge collected from around the world, I will begin investigating the close association between Peacock's imaginings about the history and power of algebra and the imaginings of British colonial state power in India. I will also say something about how Peacock's historically informed philosophy of algebra shaped the theoretical practices of a second generation of British mathematicians such as Augustus De Morgan.

**Agathe Keller & Catherine Singh**, (SAW project, CNRS-Université Paris Diderot)

*Editions and translations of Sanskrit Mathematical and Astral texts in India at the beginning of the twentieth century*

**Abstract** – By the time Datta & Singh published their long lasting manual "History of Hindu Mathematics" in 1937 in Lahore, a certain number of Sanskrit mathematical and astral texts had already been edited, and sometimes translated into English. Who made these publications? Why? What ideas of what an ancient sanskrit mathematical texts should be shaped such publications? Did this have a lasting effect on how these texts were perceived? We will especially focus on two cases, S. Dvivedin's edition of the Brāhmasphuṭasiddhānta (1902) and Rangacarya's edition and translation of the Gaṇitasārasaṃgraha (1912).