



## CALL

## FOR A POST-DOCTORAL SCHOLARSHIP IN THE FIELD OF MATHEMATICS AND ASTRONOMY IN ANCIENT CHINA

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EUROPEAN RESEARCH COUNCIL PROJECT SAW:

## "Mathematical Sciences in the Ancient World:

New Theoretical Approaches to the Sources and Socio-Political Issues of the Present Day"

led by

Karine Chemla (Principal Investigator)

Agathe Keller (co-Director)

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The ERC Project "Mathematical Sciences in the Ancient World" offers a postdoctoral grant in the field of ancient mathematics.

**General aims of the Project.** The SAW Project is devoted to mathematical sources that have come down to us from the ancient world and, more specifically, though not exclusively, to the sources produced in Mesopotamia, China, and the Indian subcontinent. The ambition of SAW is to develop new theoretical approaches in the field of the history of ancient mathematics in order to highlight a motley of practices within what at the present day is too often presented as homogeneous wholes, that is, "Mesopotamian mathematics", "Chinese mathematics", and "Indian mathematics." To this end, SAW intends to concentrate systematically on the mathematical sources produced in relation to two sectors of activity in the ancient world: the practice of astral sciences and state administrations in charge of management and financial matters.

**Description of the topic attached to the present scholarship.** This post-doctoral scholarship aims at a better understanding of the activities carried out by the 7<sup>th</sup> century scholar Li Chunfeng 李淳風 in the field of mathematics and astronomy. The applicant is invited to work on some of the following issues. A first aspect relates to the mathematics practiced in the context of administrations. Li Chunfeng 李淳風 compiled "Monographs on the pitch pipes and the calendar 律曆志" for official dynastic histories, i.e., the *History of the Jin* 晉書 and *History of the Sui* 隋書. These Monographs contain in particular a history of the system of measuring units officially enacted in China until the beginning of the 7th century. They describe measuring standards designed during several dynasties and provide important information on the authors of reforms of measuring unit systems. Why did Li Chunfeng 李淳風 approach the topic of measuring units in a historical way? What do the resulting Monographs tell us about the part taken by practitioners of mathematics in the design of the official systems of measuring units that the central institution in charge of finances specified should be used throughout the empire? More generally, how do these docu-





ments testify to the mathematical work involved in the production of systems of measuring units in ancient China? Second, Li Chunfeng's own contributions to astronomy and astrology are documented in his extant writings as well as in Monographs included in dynastic histories. To what mathematical knowledge and practice do they testify? Finally, Li Chunfeng supervised the activity of a group of scholars who annotated the collection of *Ten Classics in mathematics*, producing a sub-commentary presented to the throne in 656. Can we better understand the mathematical activities and practices of this group of scholars, in relation to their work of annotating the *Ten Classics*? Candidates applying for this scholarship should explain, in their cover letter, how they plan to contribute to our improved understanding of any of these different aspects of Li Chunfeng's biography and mathematical practices.

**Eligibility requirements**: Applicants must hold a PhD or equivalent in history, history of science, sinology or mathematics. Relevant knowledge in mathematics and philology (Chinese) is required.

**Practicalities of the scholarship:** The proposed research project should result in the publication of research papers. The scholarship is granted for one year with the possibility of an extension for one additional year pending positive evaluation.

**Beginning of the post-doctoral scholarship:** The provided starting date is October 2011; post-ponement is negotiable.

**Scientific environment**: Laboratory SPHERE (CNRS & Université Paris-Diderot), Paris.

**Application:** Applicants should submit a cover letter stating their motivation for this position and the contribution expected to the research project, as well as

- a curriculum vitae;
- a copy of PhD thesis and other relevant writings, published or not;
- academic certificates, and
- the name of one reference who has agreed to be contacted to write a letter of recommendation if requested.

Scholars of all nationalities are welcome to apply.

Note that applicants are expected to develop a project related to the research project SAW.

For questions concerning the ERC project SAW, please contact either Karine Chemla: <u>chemla@univ-paris-diderot.fr</u>, Agathe Keller: <u>kellera@univ-paris-diderot.fr</u> or Christine Proust: <u>christine.proust@univ-paris-diderot.fr</u>.

Applications should be sent **only by e-mail** to Karine Chemla: <u>chemla@univ-paris-diderot.fr</u>. It is advised to request an e-mail attesting to the actual reception of the application.

Application deadline: At the applicant's earliest convenience and in any event before September 1, 2011