

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

January 22<sup>nd</sup>, 2016

### Historiography of ancient mathematics and astral sciences in China before its professionalization

**Daniel Morgan** (ERC Project SAW & SPHERE, CNRS-Université Paris Diderot)

*A Sphere unto Itself: the Death and Medieval Framing of the History of Chinese Cosmology*

**Abstract** – This paper attempts to explain the apparent lack of dialogue between Indian and Chinese cosmologies in Six Dynasties and Tang China. Modern historians like Qian Baocong, Nōda Chūryō, Henri Maspero, Wolfram Eberhard, and Joseph Needham coming all the way to our day tell the same essential story about the history of cosmology in China: that the history of cosmology is the history of instrumentation (two-dimensional diagrams and gnomon planes vs. three-dimensional sphere instruments); that there were three true ‘schools’, the contest between which was settled by the second century, almost as soon as it had begun; that subsequent centuries were defined by crackpot ideas that threatened the rightful winner; and that Monk Yixing dealt the topic a final *coup de grâce* in the eighth century. I argue that this narrative derives from the primary sources at our disposal, i.e. Shen Yue and Li Chunfeng’s ‘heavenly patterns’ monographs of the fifth and seventh century, respectively, and Gautama Siddhārtha’s *Kaiyuan zhanjing* of 729. Revealing something of the complexities underlying this neat *telos*, I attempt to reveal how and why particular medieval authors were complicit in this narrative. The reasons are very specific to each man’s circumstances: Gautama, a Chinese-born Indian working at the Tang Clerk’s Office, whose task was to synthesise Chinese tradition; Li, who appropriated his predecessor’s work to turn it against him and argue for a different version of history; and Shen, who was following the party-line of one side in a debate that was far from over... all of which leads back to a single misinformed petition in 178 from someone making excuses to be released from his banishment in the northern wastes. One of the curious results of this narrative as it came to be over the second to eighth century is that Indian-origin cosmology that we know to have been present at that time was denied any rightful place in the history of technical knowledge. In the modern era, lastly, I will discuss how this medieval, exclusionist narrative sees continued use in comparative history of science for the ends of drawing an absolute dichotomy between Chinese and Western thought.