Kim Plofker* (kim.plofker@alumni.brown.edu). *Indian mathematics and convergence of sequences and series.* Preliminary report.

Ancient Greece is well known for its seminal contributions to the study of infinite series in the work of Archimedes—and for its distrust of the subject as a source of “paradox” in the philosophy of Zeno. Here we examine a different set of approaches to the notion of a convergent sequence or series emerging in Indian exact sciences in the first millennium CE. This talk will explore sources from early medieval mathematical astronomy up through the infinite series of the second-millennium Kerala school and some later developments. (Received September 16, 2019)