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**Yibao Xu\*** ([yxu@bmcc.cuny.edu](mailto:yxu@bmcc.cuny.edu)), Department of Mathematics, Borough of Manhattan Community College/CUNY, 199 Chambers Street, New York, NY 10007. *Mathematical Concepts of Infinity in Ancient China.*

Infinity is one of the most pivotal concepts in the history of Western mathematics. It includes basically three aspects: namely, the infinitely large or transfinite, the infinitely small or infinitesimals, and various infinite processes. With regard to ancient Chinese mathematics, one may ask if there are any such similar concepts of infinity? If so, in what contexts do such concepts of infinity appear? In what ways may comparisons of such concepts in Chinese mathematics with those in Greek mathematics be drawn? More generally, what roles did concepts of infinity play in the development of Chinese mathematics? This talk provides some answers or possible explanations to these questions primarily by examining the commentaries on the *Jiuzhang Suanshu* (Nine Chapters on Mathematical Procedures) by Liu Hui (third century C.E.). (Received September 18, 2006)