1067-01-1044 **Bruce J. Petrie*** (b.petrie@utoronto.ca), IHPST, University of Toronto, Victoria College 316, 91 Charles Street West, Toronto, ON M5S 1K7, Canada. *Johann Lambert's Use and Understanding of Mathematical Transcendence.* Preliminary report.

This paper is part of an ongoing study by the author to understand early notions of mathematical transcendence. The origin of the current definition of a transcendental number has not yet been firmly established. Various historians and mathematicians have in various degrees of certainty credited Leonhard Euler, Johann Lambert, and Joseph Liouville with having established the current definition of a transcendental number. Previous work by the author strongly suggests that Euler's use and understanding of mathematical transcendence is dissimilar to the current use of the term 'transcendental.' Motivated by Michel Serfati's (2010) claim that the first appearance of the modern definition of a transcendental number is to be found in Johann Lambert's (1761/1768) Mémoire, the author presents the results of an investigation into Lambert's general understanding and use of mathematical transcendence. (Received September 17, 2010)