1106-01-856 **Viktor Blasjo*** (v.n.e.blasjo@uu.nl). *The representation of curves in the early Leibnizian calculus.*

Transcendental curves were the focal point of a profound conflict in late 17th-century mathematics. They were at the heart of remarkable advances in the new fields of infinitesimal calculus and mathematical mechanics, but they also rendered obsolete traditional conceptions of geometrical rigour and method, forcing the boundaries of mathematics as defined by classical Greek and Cartesian geometry to be redrawn. The early development of the calculus was shaped by this tension between the old and the new, and many aspects of the early calculus that seem peculiar to modern eyes are in fact very rational attempts at resolving this forgotten conflict. I shall illustrate this by discussing some aspects of Leibniz's view of the exponential function, including his classroom-ready, do-it-yourself recipe for how to compute logarithms using nothing but an ordinary necklace chain. (Received September 08, 2014)