Maria Zack* (mzack@pointloma.edu), Mathematical, Information & Computer Sciences, Point Loma Nazarene University, 3900 Lomaland Drive, San Diego, CA 92106. Some Aspects of the History of the Cycloid. Preliminary report.

The cycloid is a simple curve with an interesting history. Many well-known mathematicians of the seventeenth and eighteenth centuries studied the cycloid. These include Roberval, Descartes, Pascal, Wallis, Huygens, Newton and Leibniz and a few Bernoullis. This talk will consider the work done on the cycloid by a few of these individuals and examine how their work connects to the development of some of the fundamental ideas of calculus. (Received September 13, 2015)