Maria R Zack* (mzack@pointloma.edu), MICS Department, 3900 Lomaland Drive, San Diego, CA 92106. Quadrature, Rectification and the Cycloid. Preliminary report.

Many well-known mathematicians of the seventeenth and eighteenth centuries studied the cycloid. These include Roberval, Descartes, Pascal, Wallis, Huygens, Fermat, Newton and Leibniz and more than one Bernoulli. 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 calculus. (Received September 15, 2019)