1041-01-107    **Deborah Kent\*** (`dkent@hillsdale.edu`), Department of Mathematics, 33 E. College Street, Hillsdale, MI 49242. *The Catenary on a Cone in Peirce's System of Analytic Mechanics.*

B. Peirce's remarkable 1855 treatise on analytic mechanics includes an expansion of earlier work investigating the catenary on a vertical cone of revolution. This talk will explore Peirce's approach to the problem; separating the curve into finite and infinite portions and relating them to Legendre's elliptic integrals to produce a nice result. (Received August 06, 2008)

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