1056-M5-445 **Lawrence A. D'Antonio*** (ldant@ramapo.edu), 505 Ramapo Valley Rd, Mahwah, NJ 07430. *Molyneux's Problem.* Preliminary report.

On July 7, 1688, the Irish natural philosopher William Molyneux wrote a letter to John Locke posing the following question. Suppose a person, being blind from birth, having learned to distinguish between a sphere and a cube of equal size by touch, where to suddenly acquire sight; would that person then be able to distinguish the sphere and cube by sight alone? This problem, having philosophical, psychological and mathematical aspects, has been a source of interest and dispute up to the present day. Besides Locke, thinkers such as Berkeley, Leibniz, Voltaire, Diderot, and Helmholtz have discussed the problem (with no consensus as to what the correct answer should be). This talk will discuss the history of this problem and address the issue of the conceptual basis of our perceptions of geometric form. (Received September 07, 2009)