

1077-01-743

**Lawrence A. D'Antonio\*** (ldant@ramapo.edu), 505 Ramapo Valley Rd, Mahwah, NJ 07430.

*Boscovich and the Line of Best Fit.* Preliminary report.

In 1757, Roger Joseph Boscovich, the Croatian-Italian-French physicist, astronomer, mathematician and poet, published an important work on determining the line of best fit. His method, based on minimizing the sum of absolute deviations between a data set and the best fit line, was applied to work on computing the ellipticity of the Earth using lengths of meridian arcs. We review this work of Boscovich and earlier work of Cotes, Euler, and Tobias Mayer. We also consider the influence of Boscovich on later research of Legendre, Laplace, and Gauss. (Received September 22, 2011)