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Johannes C. Familton (jfamilton@bmcc.cuny.edu), 199 Chambers Street, New York,, NY ,
and **Lucio Prado*** (lprado@bmcc.cuny.edu). *Rodrigues, Euler, and Hamilton: The problem of
Rotations*. Preliminary report.

In 1840 Rodrigues wrote a paper about the laws of geometry that control the displacement of a solid system in space. This work was a precursor to Hamilton's quaternions. Rodrigues' work went unnoticed until 1846 when Cayley acknowledged Euler's and Rodrigues' priority describing orthogonal transformations in a letter to the Editors of the Philosophical Magazine.

In this talk, we want discuss the history of Rodrigues' work, and his 1840 paper. We will analyze its connection with Euler's rotation theorem, and Hamilton's quaternions. (Received September 21, 2017)