

Abstract Submitted  
for the DAMOP07 Meeting of  
The American Physical Society

**An Accurate, but Novel Application of the Relative Flow Technique, Using a Moveable Aperture Source of Gas Atoms to Measure Elastic Electron Scattering Differential Cross Sections**<sup>1</sup> MURTADHA A. KHAKOO, KYLE KEANE, COLIN CAMPBELL, SHAYNE CAIRNS, California State University Fullerton CA 92834 — The implementation of a powerful, accurate and novel method to measure elastic differential scattering cross sections (DCS) from gaseous targets, without having to know the molecular diameters of the gases used, will be presented. This is possible by taking advantage of the cosine angular distribution of gas produced by a thin aperture source. Preliminary tests with N<sub>2</sub> and C<sub>2</sub>H<sub>4</sub> and other polyatomics will be presented at the meeting.

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