

Abstract Submitted  
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**Theoretical and Experimental Fully Differential Cross sections for 54 eV electron-impact ionization of oriented H<sub>2</sub>**<sup>1</sup> ADAM UPSHAW, DON MADISON, Missouri S&T, JAMES COLGAN, Los Alamos National Lab, XUEGUANG REN, ARNE SENFTLEBEN, THOMAS PFLUEGER, ALEXANDER DORN, JOACHIN ULLRICH, Max-Planck-Institute for Nuclear Physics, Heidelberg, Germany — Experimental fully differential cross sections are measured for 54 eV electron impact ionization of oriented H<sub>2</sub>. One final state electron is measured in the scattering plane at an angle of 50 degrees from the incident beam direction and the other final state electron is measured in a plane perpendicular to the incident beam. Both electrons have an energy of 18 eV. The experimental results will be compared with TDCC (time dependent close coupling) results and M3DW (molecular 3-body distorted wave) results. The importance of different scattering mechanisms will be discussed.

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Don Madison  
Missouri S&T

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