

Abstract Submitted
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Electron Collisions with Formic Acid VIOLAINE VIZCAINO, JAMES SULLIVAN, STEPHEN BUCKMAN, AMPL, RSPHYSSE, Australian National University, Canberra ACT 0200, Australia, CENTRE FOR ANTIMATTER MATTER STUDIES COLLABORATION — Formic acid (HCOOH) is the simplest of the organic acids and it is thought that it could play a key role in the formation of simple biomolecules such as glycine and acetic acid in the interstellar medium. We have studied elastic electron scattering from formic acid using a crossed-beam electron spectrometer. Absolute cross sections are obtained using the relative flow technique. Flow rates for HCOOH , and the reference gas He, are measured at a number of temperatures, including both room temperature and 70°C , in order to investigate the effects of molecular dimers, which are thought to dominate at room temperature. Measurements at energies in the range 1.8-50 eV will be presented at the meeting and compared with several recent theoretical calculations.

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