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Electron Impact Ionization of CH₄and NH₃¹ HARI CHALUVADI, DON MADISON, Missouri S and T, KATE NIXON, ANDREW MURRAY, University of Manchester, CHUANGANG NING, Tsinghua University — Experimental and theoretical Triply Differential Cross Sections (TDCS) will be presented for electron-impact ionization of Methane (CH₄) and Ammonia (NH₃) (same number of electrons and protons) for both the highest occupied molecular orbital (HOMO) and next highest occupied molecular orbital (NHOMO). M3DW (molecular 3-body distorted wave) results will be compared with experiment for coplanar geometry and for perpendicular plane geometry (a plane which is perpendicular to the incident beam direction). In both cases, the final state electron energies and observation angles are symmetric and the final state electron energies range from 1.5eV to 30eV.

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