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Comparison between Experiment and Theoretical Results for (e, 2e) Ionization of the $3\sigma_g$ State of N_2[1] OLA AL-HAGAN, DON MADISON, Missouri University of Science and Technology, LEIGH HARGREAVES, CHRISTOPHER COLYER, BIRGIT LOHMANN, University of Adelaide, Australia, CHUANGANG NING, Tsinghua University, Beijing, China — A comparison between experimental and theoretical results for (e, 2e) ionization of the $3\sigma_g$ state of N_2 will be presented. The theory presented here is the molecular three-body distorted wave (M3DW) approximation using better wave function for the molecules than we had in previous works. Results will be shown in coplanar symmetric and coplanar asymmetric geometries. We found improved agreement with experimental data using the new wave function. N_2 measurements are of particular interest due to the possibility of observing the effects of 2-center Young's-type interference terms in the cross sections. The existing experimental data suggests an interference peak but is inconclusive.

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