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Long-range multipole potential model study for Rydberg states of triatomic hydrogen molecule¹ JIA WANG, JILA and University of Colorado, Boulder, V. KOKOOULINE, University of Central Florida, C.H. GREENE, JILA and University of Colorado, Boulder — The long-range multipole potential model has proven to be useful in studying Rydberg states of the hydrogen molecule (H₂). In this model, the Rydberg electron interacts with the ion core through polarizability and quadrupole interactions. In conjunction with multichannel quantum defect theory (MQDT), we apply this model to the study of the energy levels of Rydberg states in the triatomic hydrogen molecule (H₃).

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