

Abstract Submitted
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Dipole Transitions for the hydrogen molecule using Fully Nonadiabatic Wavefunctions STEVEN ALEXANDER, Southwestern University, R.L. COLDWELL, University of Florida — Using variational Monte Carlo and simple, explicitly-correlated fully-nonadiabatic wavefunctions we have computed highly accurate trial wavefunctions for the lowest rovibrational state of several states of the hydrogen molecule. With these wavefunctions we have calculated the transition moments for all possible dipole transitions and we compare our results with those from more traditional calculations.

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