

Abstract Submitted  
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**Ultracold collisions between Rb and excited NH<sup>1</sup>** STEVEN WRATHMALL, EDMUND MEYER, DANIEL HAXTON, HEATHER LEWANDOWSKI, CHRIS GREENE, JILA and University of Colorado at Boulder — Rb–NH is a system of both fundamental and current experimental interest. We investigate the prospect of collisional processes between the Rb (5p) + NH (X <sup>3</sup>Σ<sup>-</sup>) and Rb (5s) + NH (<sup>1</sup>Δ) states in the Rb–NH system. The inelastic collision processes inherently involve more than one Born-Oppenheimer potential surface, which is of general interest in the study of atomic and molecular collisions.

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