

Abstract Submitted
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Electric-field-induced inelastic collisions between magnetically trapped hydroxyl radicals¹ BENJAMIN STUHL², MARK YEO, MATTHEW HUMMON, JUN YE, JILA / University of Colorado — We have observed inelastic collisions between magnetically trapped hydroxyl (OH•) molecules at a temperature of 45 mK, induced by the presence of an electric field. We measured the collisional loss rate over electric field strengths of 0.2-10 kV/cm. Accurate measurements of the loss rate also required recognition and understanding of a new form of single-body trap loss, arising from non-adiabatic transitions between Zeeman levels at avoided crossings created by the presence of a transverse electric field.

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