

Abstract Submitted
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A new density regime for cold hydroxyl radicals DAVID REENS, HAO WU, Univ of Colorado - Boulder, TIM LANGEN, IQST, Universitt Stuttgart, ANNA MCAULIFFE, NOPPODOL PUNSUEBSAY, Univ of Colorado - Boulder, JUN YE, JILA, University of Colorado / NIST — With the goal of studying hydroxyl radicals in the ultracold regime typically attained with alkali atoms, we are pursuing evaporative cooling of a 50 mK trapped sample decelerated from a molecular beam. To this end, we have recently developed a novel trap that is plugged against spin-flip losses. We are also unveiling a successfully remodeled system with nearly a 100-fold increase in molecule density. We will be reporting on exciting evidence of strong molecular collisional effects obtained with this system.

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