Abstract Submitted
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An RF 3-D Magneto-Optical Trap for YO ALEJANDRA COLLOPY, YEWEI WU, SHIQIAN DING, IAN FINNERAN, JILA, University of Colorado and NIST, LOIC ANDEREGG, BENJAMIN AUGENBRAUN, JOHN DOYLE, Harvard University and Harvard-MIT Center for Ultracold Atoms, JUN YE, JILA, University of Colorado and NIST — We implement a laser cycling transition in the molecule yttrium monoxide that allows us to cycle on the order of 10^6 photons. We utilize this transition to effect slowing from a cryogenic buffer gas cell to trappable velocities. We then load molecules in our 3D RF ($\sim$5 MHz) magneto-optical trap. Looking forward, we plan to utilize a narrower ($\sim$150 kHz) transition to enact further cooling to the 10 μK regime.

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