

Abstract Submitted  
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**Dual potassium-cesium MOT for production of ultracold molecules**<sup>1</sup> MARIN PICHLER, DAVID HALL, MICHAEL GARMAN, DANIEL BARKER<sup>2</sup>, Physics Department, Goucher College, Baltimore MD 21204 — We present our setup for simultaneous trapping of potassium and cesium atoms in a dual MOT. Our goal is to use the trapped atoms to form ultracold *KCs* molecules by photoassociation. The setup consists of all diode lasers for *Cs* and a tapered amplifier for *K* atoms cooling. In addition, we also use diode lasers for photoassociation. The setup relies on trap-loss or ion detection. We will discuss possibilities for deeply bound ground state molecule production via state coupling, as well as resonant multi-photon detection schemes and applications.

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