

Abstract Submitted  
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**Toward trapping cold molecules produced via “kinematic” cooling** JEFFREY J. KAY, Sandia National Laboratories, SEBASTIAAN Y. T. VAN DE MEERAKKER, Fritz-Haber-Institut der Max-Planck-Gesellschaft, KEVIN E. STRECKER, DAVID W. CHANDLER, Sandia National Laboratories — “Kinematic” cooling is a relatively simple technique by which a vast array of molecules can be translationally cooled using crossed atomic and molecular beams. The success of the technique relies primarily on the existence of an approximate mass degeneracy between the molecule to be cooled and its atomic (or molecular) collision partner. Here, we discuss progress toward electrostatic trapping of cold molecules produced using this technique. Schemes that allow optimization of cold molecule production by tuning the velocity of the molecular beam will also be discussed.

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