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**Kinetics of Cold Molecule Production in “Kinematic”  
Cooling** JEFFREY KAY, KEVIN STRECKER, DAVID CHANDLER,  
Sandia National Laboratories — “Kinematic” cooling is a general 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 factors that affect the efficiency of cold molecule production by this method, as well as schemes that may allow tunability of the velocity and temperature of the cold molecules on a fine scale.

Prefer Oral Session  
 Prefer Poster Session

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