

HIGH PRECISION SPECTROSCOPY AND CONTROLLED DIMER FORMATION IN A CRYOGENIC ENVIRONMENT

DAVID PATTERSON, *Physics, University of California, Santa Barbara, CA, USA*; GRETA KOUMARIANOU, *Chemistry and Biochemistry, UCSB, Santa Barbara, CA, USA*; LINCOLN SATTERTHWAITE, DANIEL SORENSEN, *Physics, University of California, Santa Barbara, CA, USA*.

A cryogenic buffer gas cell at a few degrees Kelvin provides a bright source of internally cold and slow moving molecules. I will be presenting recent results from our buffer gas spectrometers, including direct observation of dimer formation with conformationally selected reagents and high-resolution spectroscopy in slow, bright buffer-gas cooled molecular beams.