Abstract Submitted
for the MAR07 Meeting of
The American Physical Society

Coherent control of wavepacket motion in Cesium dimers
ROBERT MURAWSKI, DMITRY PESTOV, VLADIMIR SAUTENKOV, Texas A&M — We present an experimental investigation of wave packet dynamics in Cesium dimers. Using femtosecond pump-probe techniques (both degenerate and non-degenerate), we observe transmission oscillations which correspond to motion of the coherent wavepackets in the ground state and in excited states. The use of a second pump beam, the control, allows us to selectively excite certain oscillations and suppress others by adjusting the relative delay between them. Additionally, some preliminary results on Coherent Anti-Stokes Raman Scattering (CARS) in Cesium dimers will be presented.

Robert Murawski
Texas A&M

Date submitted: 03 Dec 2006 Electronic form version 1.4