Abstract Submitted
for the MAR09 Meeting of
The American Physical Society

An Investigation of Methanol Transitions at Cold Temperatures through Collisional Cooling KELLY SALB, DANIEL WILLEY — The detection of molecular transitions in the interstellar medium (ISM) has long been of interest to astrophysicists. If molecules and their interactions can be understood, then scientists may better understand the workings of space such as star formation. Methanol, CH3OH, has long been detected by astrophysicists in the ISM as an important constituent with a rich spectrum as a result of its asymmetry and that its low-energy torsional vibrations of the methyl group against the OH top can be excited under interstellar conditions. We investigate collisions of methanol with helium, a prominent constituent of the ISM, at temperatures between 5-30K through spectroscopy to better understand the interaction in the ISM.

Kelly Salb

Date submitted: 21 Nov 2008 Electronic form version 1.4