3-D SUBMILLIMETER SPECTROSCOPY OF ASTROPHYSICAL 'WEEDS' – CONTINUED ANALYSIS

SARAH M. FORTMAN, IVAN R. MEDVEDEV, CHRISTOPHER F. NEESE, and FRANK C. DE LUCIA,
Department of Physics, 191 W. Woodruff Ave., The Ohio State University, Columbus, OH 43210-1106 USA.

In this presentation we report on the latest enhancements of the temperature resolved 3-dimensional spectroscopic technique and the recent results obtained. We have continued the analysis in the 210-270 GHz and 560-650 GHz spectral regions of the astrophysical weeds CH_3OH, CH_3CN, CH_3CHO, CH_3OCH_3, C_2H_3CN, C_2H_5CN, CH_3OCHO and SO_2. Our analysis includes a detailed comparison of the intensities of the quantum mechanical assignments and the experimental intensities to determine the completeness of each molecule as a function of temperature.