THE ANALYSIS OF ASTROPHYSICAL 'WEEDS' USING 3-D SUBMILLIMETER SPECTROSCOPY

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We have previously reported on an experimental spectroscopic approach that makes possible the calculation of lower state, energy levels and transition strengths without the need for spectral assignment. We produce results both in the standard catalog format (frequency, line strength and lower state energy) as well as a point by point fit which allows the user to predict the complete spectrum at an arbitrary temperature. We report our continued analysis of several weeds in the 210-270 and 560-650 GHz regions as well as improvements in our analysis strategies.