

THE JET PROPULSION LABORATORY SUBMILLIMETER, MILLIMETER AND MICROWAVE SPECTRAL LINE CATALOG

HERBERT M. PICKETT, R. L. POYNTER, E. A. COHEN, M. L. DELITSKY, J. C. PEARSON and H. S. P. MÜLLER. *Jet Propulsion Laboratory, California Institute of Technology, Mail Stop 183-301, 4800 Oak Grove Dr., Pasadena, CA 91109.*

The Jet Propulsion Laboratory Submillimeter, Millimeter and Microwave Spectral Line Catalog is an on-line computer accessible data base of atmospheric and astrophysical molecules with transitions in the 0 to 10,000 GHz frequency range. The current fourth edition of the catalog contains 298 species and 1,448,151 lines. The information listed for each spectral line includes the frequency with its estimated error, the intensity, the lower state energy and the quantum number assignment. The catalog has been constructed by using theoretical least squares fits of published spectral lines to accepted molecular models. The resulting predictions and their error estimates are based on the fitted parameters and their covariances. The catalog is continuously expanded and updated as new data appears. The catalog and the analysis programs used in its generation are available via anonymous ftp at [spec.jpl.nasa.gov](ftp://spec.jpl.nasa.gov) or on the world wide web at <http://spec.jpl.nasa.gov>.

Time required: 10 min

Session in which paper is recommended for presentation: 7