THE COLOGNE DATABASE FOR MOLECULAR SPECTROSCOPY, CDMS

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One central part of the CDMS[a] is a catalog of (mostly) rotational transition frequencies of atomic and molecular species from the radio frequency to the far-infrared regions (i. e. frequencies up to 18 THz or wavelengths longer than 16.5 μm). As of January 2003, the catalog contains more than 170 species of astrophysical, astrochemical, and planetary interest. The predictions are based on fits of critically reviewed experimental data. Some recent entries and a search routine will be discussed briefly as will be the need for additional experimental data.

Other sections of the database list the molecules detected in interstellar space or circumstellar envelopes and provide the newest spectroscopic data obtained (partially) in Cologne. Recent changes to the database, links, and contact opportunities are also available. An additional section on fitting spectra gives information and examples to spectroscopy programs which are used in Cologne, but is currently limited to Herb Pickett's SPFIT and SPCAT.

The database is available online free of charge at **http://www.ph1.uni-koeln.de/vorhersagen/** or *via* the short-cut **http://www.cdms.de/**.

[a] H. S. P. Müller, S. Thorwirth, D. A. Roth, and G. Winnewisser, *Astron. Astrophys.* **370,** (2002) L49–L52