Interstellar Ices : the confrontation of the laboratory approach with ISO spectroscopic results

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Abstract

The results we have recently obtained from the SWS instrument (AOT 01 and 06) on a protostellar source, show, as expected a variety of solid state features attributed to dirty ices. Laboratory experiments, designed since 10 years, allow not only the identification and quantification of solid state molecules, but the exact reproduction of the infrared spectra obtained by ISO. Interstellar ices and their photochemical evolution can be fully duplicated in the laboratory, showing that experimental astrochemistry is now a fully mature field.