
Solar System science with ALMA

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Résumé

Millimetre astronomy is well suited to the study of Solar System bodies as it allows to study their atmospheres and surfaces. In this range, most molecules around planets, satellites, and comets, can be studied through their rotational spectral lines. They can be imaged using interferometric techniques to study the composition and dynamics of the atmospheres. In addition the continuum thermal emission of Solar System bodies provide access to their (sub)surface properties. In that framework, ALMA is of great interest since it offers unequaled sensitivity, angular resolution and spectral capabilities in this the (sub)millimetre range. I will present some typical science cases of planetary science studied before ALMA and the kind of progress that ALMA will enable. I will summarize the projects targetting Solar System objects that were accepted for observations in the cycles 0 and 1 of ALMA science observations, and show, when available, some images or results.

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