

Jeudi 29 novembre 2018 à 11h30 (IAS, bâtiment 121, salle 1-2-3)

Interstellar ices: From laboratory to model and observations

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Interstellar dust grains have been recognised to be important catalysts for the formation of the simplest (H_2) to the most complex molecules in space. While many processes occurring on dust surfaces have been studied experimentally and theoretically during the last decades, the step from experimental and theoretical studies to astrophysical modelling and observations still represents a great challenge.

In this talk I will present how the formation chemical species and ices are studied in the laboratory, and which models can be used to interpret the experimental results. These models are then applied to different astrophysical environments such as pre-stellar cores. I will show that the way the formation of simple ices such as CO is treated has a very important impact on the abundances of species found in pre-stellar cores.