

## Séminaire de Chimie Théorique

Salle de réunion groupe THEO, 3eme Est, bat. A12 Lundi 6 Juin à 11:00

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## Tunneling and formation of small molecules in interstellar space

During the birth of new stars, gravitational energy is released when pieces of matter approach each other. This results in increased kinetic energy. For the star formation process to continue efficiently, part of that kinetic energy must be removed, which can occur through electromagnetic radiation. Molecules are efficient radiators and it is therefore of interest to know what molecules exist in interstellar medium and how they form and break up. The most common interstellar molecule is H2. I will discuss its formation on icy grain surfaces. I will also briefly discuss formation of small molecules through radiative association, which is a process where a molecule forms through spontaneous emission of a photon.

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