Service d'Astrophysique SÉMINAIRE

Mardi 27/01/2015, 10h00-11h00

CEA Saclay, Orme des Merisiers Bat 713, salle de séminaires Galilée

EXPLORING MOLECULAR COMPLEXITY WITH ALMA (EMOCA)

ARNAUD BELLOCHE

MPIfR Bonn, Germany

One of the key sites to search for new complex organic molecules in the interstellar medium (ISM) has turned out to be the star-forming, hot, molecular cloud core Sgr B2(N). I will present the first results of the EMoCA survey conducted toward this source with ALMA in its Cycles 0 and 1. This spectral line survey covers the 3 mm atmospheric window and aims at deciphering the molecular content of Sgr B2(N) in order to test the predictions of state-of-the-art astrochemical numerical simulations and to gain insight into the chemical processes at work in the ISM. I will report on the first detection of a branched alkyl molecule in the ISM. I will discuss the implications of this detection in terms of interstellar chemistry and its possible connection to the complex organic molecules found in meteorites.