P148a The inventory of Nitrogen-bearing organics towards G+0.693-0.027

Shaoshan Zeng (RIKEN), Izaskun Jiménez-Serra (CSIC-INTA), Victor M. Rivilla (CSIC-INTA), Lucas Rodríguez-Almeida (CSIC-INTA) et al.

Among over 250 molecules discovered in the ISM, nitrogen-bearing (N-bearing) species, in particular Nbearing complex organic molecules (COMs), are of interest as many likely play a crucial role in prebiotic chemistry and thus are essential ingredients for the emergence of life. With the most recent unbiased spectral survey towards the Galactic Centre molecular cloud G+0.693-0.027 using the Yebes 40m and the IRAM 30m telescopes, I will present the census of N-bearing COMs detected towards this source, including the first detection of vinylamine (C₂H₃NH₂) and tentative detection of ethylamine (C₂H₅NH₂) in the ISM. As increasing evidences have suggested that G+0.693-0.027 might be the pre-stellar precusor of a massive star-forming cluster in the Sgr B2 region, our results show that extremely rich and amazing chemical complexity can be triggered in early evolutionary stages of molecule clouds.