Sagittarius (Sgr for short) B2 is the most massive and luminous star-forming region in our Galaxy, located close to the Galactic Center. We have carried out a molecular line survey with the IRAM 30 m telescope toward its two major sites of star-formation, Sgr B2(M) and (N).\(^a\) Toward the latter source, which is particularly rich in Complex Organic Molecules (COMs), we detected three molecules for the first time in space, aminoacetonitrile, ethyl formate, and \(n\)-propyl cyanide.

We have recently obtained ALMA data of Sgr B2(N) between \(\approx 84\) and \(\approx 111\) GHz within Cycle 0 and one additional setup up to \(114.4\) GHz within Cycle 1. At angular resolutions of \(1.8''\) and \(1.4''\), respectively, the two main hot cores, the prolific Sgr B2(N-LMH) (or Sgr B2(N)-SMA1) and the likely less evolved Sgr B2(N)-SMA2 are well separated, and line confusion is reduced greatly for the latter. As a consequence, we have been able to identify the first branched alkyl molecule in space, iso-propyl cyanide, toward Sgr B2(N)-SMA2.\(^b\) Our ongoing analyses include investigations of cyanides and isocyanides, alkanols and thioalkanols, and deuterated molecules among others. We will present some of our results.


\(^b\)A. Belloche et al., Science 345 (2014) 1584.