



**SFB 956 colloquium on April 22, 2013**

## **Internal presentation**

Presenter| Arnaud Belloche

Presentation title| Complex Organic Molecules in the Interstellar Medium: Pushing the Limits with Millimeter-wavelength Spectroscopy

### **Abstract**

Almost 170 different molecules have been discovered in the interstellar medium (ISM) or in circumstellar envelopes of late-type stars so far. These molecules still have a limited degree of chemical complexity. In contrast, the molecular inventory of meteorites found on Earth includes more than 80 distinct amino acids (the building blocks of proteins), with a composition suggesting an interstellar origin. However, none has been detected in the ISM so far. The key site to search for new complex organics in the ISM is the star-forming hot molecular cloud core Sgr B2(N). I will present our single-dish line survey of this source and describe the techniques used to decipher its molecular content. This analysis led to the detection of several new species and will serve as a solid basis for the search for new complex organics with ALMA. I will discuss the perspectives offered by this new, powerful interferometer in this context.