

## ALMA2019: Science Results and Cross-Facility Synergies



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## A2C2S: The ALPINE ALMA C+ survey of galaxies at $4 < z < 6$

*Wednesday, October 16, 2019 9:00 AM (25 minutes)*

Invited talk

Abstract:

“A2C2S is a large survey of 122 normal star-forming galaxies observed in the [CII]-158 $\mu$ m line and continuum. It aims at understanding stars, gas and dust properties at a time of rapid galaxy maturation after the end of HI reionization, at redshifts  $4 < z < 6$ . With A2C2S it becomes possible to trace the cosmic time evolution of the star formation rate from a complete census at this key epoch, as well as to conduct a detailed characterization of ISM properties using LFIR/LUV and C+/FIR diagnostics. Dynamical masses are estimated from spectrally resolved C+, opening the way to measurements of the gas fraction and its evolution. A2C2S is providing a rich Legacy in the data-rich extragalactic survey fields ECFDS and COSMOS enabling studies with future facilities like JWST or the ELT. The key results will be presented at this meeting.”

**Presenter:** Dr GINOLFI, Michele

**Session Classification:** Cosmology