



INSTITUTE SEMINAR

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SPEAKER

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TITLE

Astrochemistry at low metallicity

ABSTRACT

Chemical compositions of the interstellar medium in low metallicity environments are crucial to understand chemical processes in the past universe where abundances of heavy elements were significantly lower than the solar metallicity. In star-forming regions, it is well known that both gas-phase and solid-phase chemistry play an important role for the overall chemical evolution of dense molecular clouds. Multiwavelength observations of molecular gas and ices are thus essentially important for comprehensive understanding of chemical processes associated with star-formation activities. In this talk, I will review recent radio and infrared observations of molecular gas and ices around young stellar objects in nearby low-metallicity galaxies, and discuss the impact of decreased metallicity on chemical properties of star-forming regions.