



Contribution ID: 21

Type: **Invited talk**

## Insights into the Life Cycle of Dust at Low Metallicity from the Local Group and Nearby Galaxies

*Thursday, 14 June 2018 16:15 (35 minutes)*

Dust plays critical roles in many of the processes occurring in the interstellar medium and dust's infrared emission serves as a probe of the ISM and star formation in galaxies out to high redshift. The role of dust in ISM physics and its use as a probe of distant galaxies both depend on the characteristics of the grain population: the dust-to-gas ratio and the grain composition, charge, and size distributions. These properties are set by the life cycle of dust in the ISM, which may be dramatically different in the low metallicity conditions prevalent at high redshifts or in nearby dwarf galaxies. I will present results from several efforts to constrain aspects of the dust life cycle in nearby, low metallicity environments.

**Consider for a poster?**

**Presenter:** Dr SANDSTROM, Karin (University of California, San Diego)

**Session Classification:** Dust as a galaxy probe

**Track Classification:** Dust as a tool