

PHYSICS AND ASTRONOMY COLLOQUIUM

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"Interstellar Dust at Low Metallicity"

Abstract

Dust plays critical roles in many of the processes occurring in the interstellar medium and dust's infrared emission serves as a tracer for the ISM and star formation from the nearby universe out to high redshift. While most of our knowledge of dust is built from observations of the local area of the Milky Way, it is clear that dust properties change dramatically in low metallicity conditions which may be prevalent at high redshift and in nearby dwarf galaxies. I will discuss what we know about how dust properties change with metallicity and how this can impact physical processes occurring in the ISM. I will also present new results from studying low-metallicity dust in the Small Magellanic Clouds and other nearby galaxies. Finally, I will describe the exciting prospects for learning more about low metallicity dust with new and upcoming observational facilities like the James Webb Space Telescope.

Wednesday, October 25, 2017 2:30 p.m. Elliott Building Room 167