The Spitzer infrared nearby galaxies survey (SINGS)

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The Spitzer Space Telescope is providing dramatic new insights into star formation and the dusty interstellar media of galaxies. The Spitzer images and spectra, when combined with observations at ultraviolet and visible wavelengths, provide complete detailed maps of the current star formation, covering the full range of interstellar environments and evolutionary stages. The same data delineate the structure and topology of the cold interstellar media (ISM) in galaxies in unprecedented depth and detail, allowing us to probe the physical interplay between star formation and the ISM, down to the scales where star formation events are triggered.

This talk will highlight early results from the Spitzer Infrared Nearby Galaxies Survey (SINGS), a Legacy study of 75 nearby galaxies that span the range of types, luminosities, and infrared properties found in the local universe, and the most comprehensive multi-wavelength survey of nearby galaxies undertaken to date. As with all of the Spitzer Legacy projects, SINGS is designed to maximize the scientific and archival value of its dataset to the astronomical community at large, and the talk will emphasize the richness of the SINGS data for a wide range of astrophysical applications, and as a stepping stone for surveys with Hershel and other future space infrared facilities.