

Results from the Spitzer Infrared Nearby Galaxy Survey (SINGS)

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SINGS is the Spitzer Legacy Science project (R. Kennicutt, PI) designed to study the interstellar medium and star formation in well resolved nearby galaxies using the powerful infrared diagnostic tools available on the Spitzer Space Telescope. SINGS has generated a rich data set of imaging and spectroscopy that has yielded several breakthrough results, either alone or in combination with ancillary data. The talk will summarize the project approach and highlight results in areas such as the characterization of star formation rate estimators, the infrared-radio correlation within galaxies and its implications for cosmic ray physics, the spectral energy distribution of dusty galaxies, and the mid-infrared ionic fine-structure lines and the rotational lines of molecular hydrogen.