

R03a **The buried starburst in the interacting galaxy, II Zw 096 as revealed by the Spitzer Space Telescope**

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GOALS, the "Great Observatories All-sky LIRG Survey" is a Spitzer Legacy program whose key component is an investigation with Spitzer, HST, Chandra and GALEX of 202 low-redshift, Luminous Infrared Galaxies (LIRGs) chosen from the IRAS Revised Bright Galaxy Sample. The GOALS sample includes both isolated and interacting galaxies, covering the full range of interaction stages from wide pairs to late stage mergers. Here, we report on our analysis of one particularly interesting member of GOALS, the $z=0.036$ merging galaxy II Zw 096. In this LIRG, the source of the far-infrared radiation is completely hidden in the UV and optical. At least 90% of the total infrared luminosity from the system comes from an extremely red source between the galactic nuclei. We estimate the star formation rate from this source to be about 42 solar masses per year. Spitzer IRS spectra indicate no obvious high-ionization lines from a buried AGN in this source. The high-resolution B, I, and H-band images show many bright star clusters surrounding the far-infrared source. The colors of these clusters suggest at least two populations - those with ages of 3-5 Myr and those with ages of 20-200 Myr, reddened by 1-2 magnitudes of visual extinction. The masses of these clusters are between 1-10 million solar masses.