

Dust Masses for Normal Star-forming Galaxies as Determined with the Aid of the Dale-Helou Phenomenological Model Template Spectra

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Dust is crucial in understanding the properties and evolution of galaxies as well as the formation of stars and planets. It controls the absorption and scattering of starlight, which affects the observations of distant objects and the overall structure of galaxies. We present a novel method to estimate the dust masses for normal star-forming galaxies, utilizing the Dale-Helou Phenomenological Model Template Spectra. We derive the dust mass for each spectral template and test this method by comparing the dust masses for real galaxies with that derived from detailed dust models.