

Resolved SFR and stellar mass determinations at kpc scale in the Antennae galaxies

Star formation rate (SFR) and stellar mass estimations of galaxies computed using integrated data can be impacted by strong local variations of stellar and dust distributions. Numerous distant dust-obscured galaxies exhibiting disturbed morphologies have been observed and we propose to use the Antennae Galaxies as a resolved local proxy for $z \sim 2$ galaxies. We combine GALEX, HST, PAN-STARRS, and Spitzer images of the Antennae Galaxies to study the variations of the broadband spectral energy distributions (SEDs) of 58 ~ 1 kpc size regions in this nearby prototypical major merger. We compare the estimates of the SFR and stellar mass of the galaxies as a whole to the SFR and stellar mass estimates of the 58 regions altogether. We discuss the difference found between the different estimations in relation to the very complex dust attenuation process going on in the Overlap regions.