

The cross-correlation between CIB and galaxy clustering

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Understanding the intricate relationship between star-formation rates from Cosmic Infrared Background (CIB) and other large scale structure tracers holds key insights into the evolving cosmic landscape. By cross-correlating the CIB data and other large-scale structure (i.e. CMB lensing and galaxy clustering), we can unravel the underlying dynamics and give better constraints on the models as well as retrieve the primordial information hidden behind the interference of these tracers. With the galaxy clustering data from Euclid in the near future, we can unravel the information hidden in the redshift distribution of star forming rate by its cross-correlation with Cosmic Infrared Background data from Planck. Thus, a better tomographic constrain on the halo model can be achieved.

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