Poster

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PREDICTIONS FOR THE REDSHIFT 5-8 [CII] INTENSITY DISTRIBUTION

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The ionic [C II] fine structure line at 158 μm is one of the brightest lines in the spectrum of star-forming galaxies. It is an excellent target for unresolved spectral line intensity mapping observations at redshifts 5 to 8, where the far-IR line can be observed through mm atmospheric windows with ground based telescopes such as CCAT-p, providing an integral, unbiased tomographic view of the star formation activity and source distribution throughout the epoch of reionization. Numerous authors have been investigating the feasibility of such observations. I review the different approaches to predict the expected signal, based on simulations, semi-analytical models, and observationally derived scaling relations.