Efforts and Challenges in Intensity Mapping with [CII], CO, Ly- α , [NII], and other lines.

Abigail Crites^{*1}

 1 Caltech – United States

Abstract

I will provide an overview of current and future intensity mapping efforts focusing on [CII], CO, Ly- α , [NII], and other lines. I will summarize the scientific targets probed with these lines at a variety of redshifts. Additionally I will discuss of the challenges we are facing as a community, including challenges in instrumentation, simulation, and analysis and how these challenges (e.g. foreground removal, instrument sensitivity), will affect what we can probe about our universe over cosmic time with these lines and where we may direct our efforts as a community to overcome these challenges.

^{*}Speaker