**Mapping an ionized bubble at z ~ 7: understanding the galaxies that drove reionization**

Cosmic reionization is driven by the first galaxies in the Universe. These early luminous sources carved out bubbles of ionized gas around them, which grew and overlapped over time until the Universe was completely reionized. Thus, it is crucial to fully characterize the galaxies powering these bubbles in order to understand the reionization timeline and topology. However, until now, observations of these systems have been limited to only the most extreme, luminous objects. We propose to use deep *JWST*/NIRCam wide field slitless spectroscopy to characterize the fainter, more typical galaxy population within an ionized bubble for the first time. We will leverage the unparalleled sensitivity of *JWST*/NIRCam to obtain deep spectroscopy over the bubble in the F356W filter, which includes the redshifted nebular emission lines Hβ and [OIII]4959,5007 at the redshift of the bubble (z ~ 7). We will use these observations to (1) identify previously unknown, faint galaxies in the bubble, and (2) robustly measure the ionizing photon emissivity of the bubble’s entire galaxy population. This program will yield the most complete constraints to date on the properties of the galaxies that reionize the Universe, as well as the resulting topology. Ultimately, our project will be a pathfinder for increasingly detailed future studies of the reionization process and the evolution of galaxies at early cosmic times.