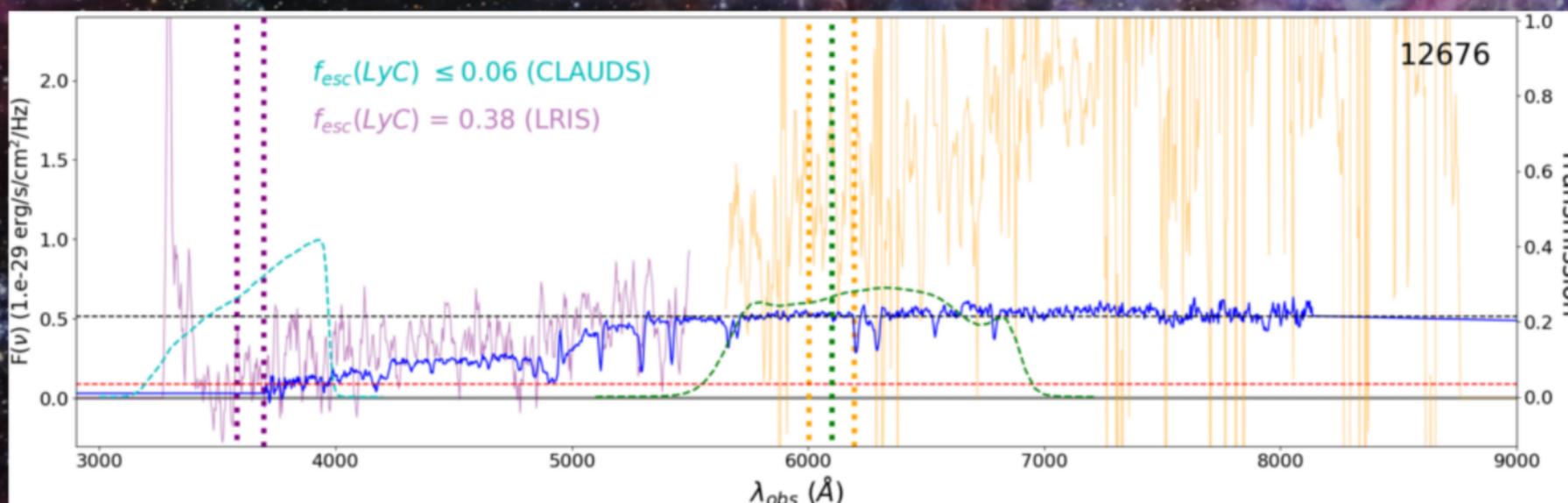


LyC emitting galaxy candidates selected based on accurate redshift + strong U-band detection

Selected Galaxies are "bright" in the u-band (25.5-27.5 mag) as these are the most likely to exhibit escaping LyC radiation.

Targets LyC at $z > 3.0$

Galaxies in the final sample are either compact single objects or possible mergers.

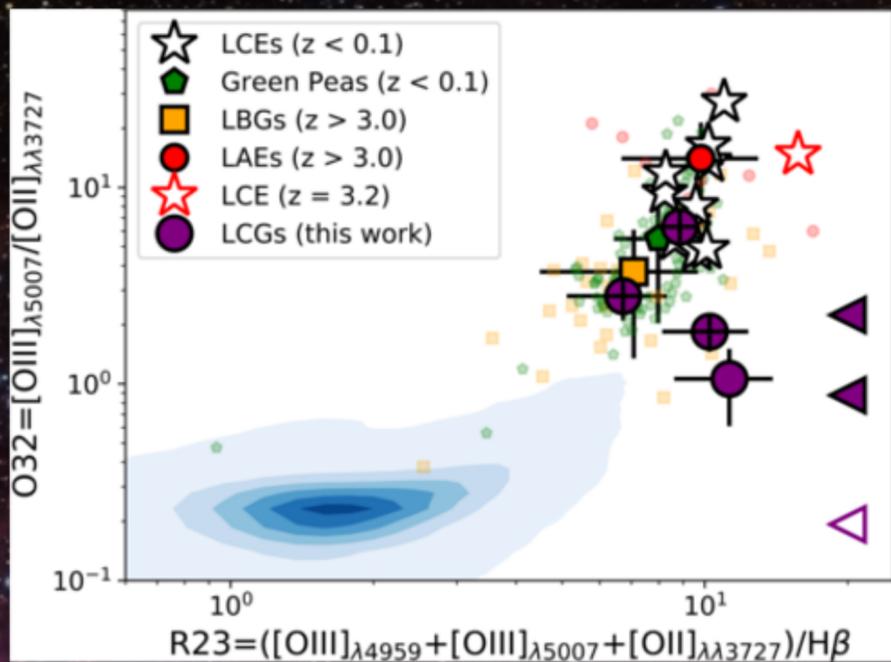


We estimate LyC escape fraction using u and r band photometry along with composite LBG stacked LRIS spectra from Shapley et al. (2003). This is then compared with [OIII]/[OII] line ratios from MOSFIRE observations.

Photometric Selection of LyC Emitting Galaxies

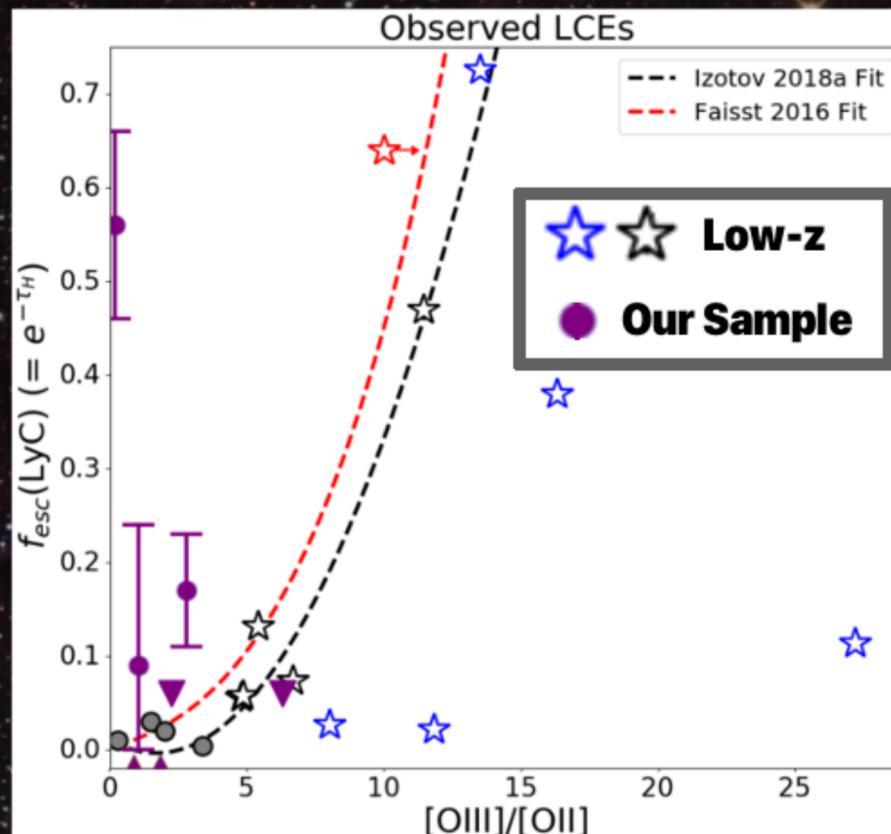


Robert Bassett, Emma Ryan-Weber, Jeff Cooke, Uros Mestric, et al



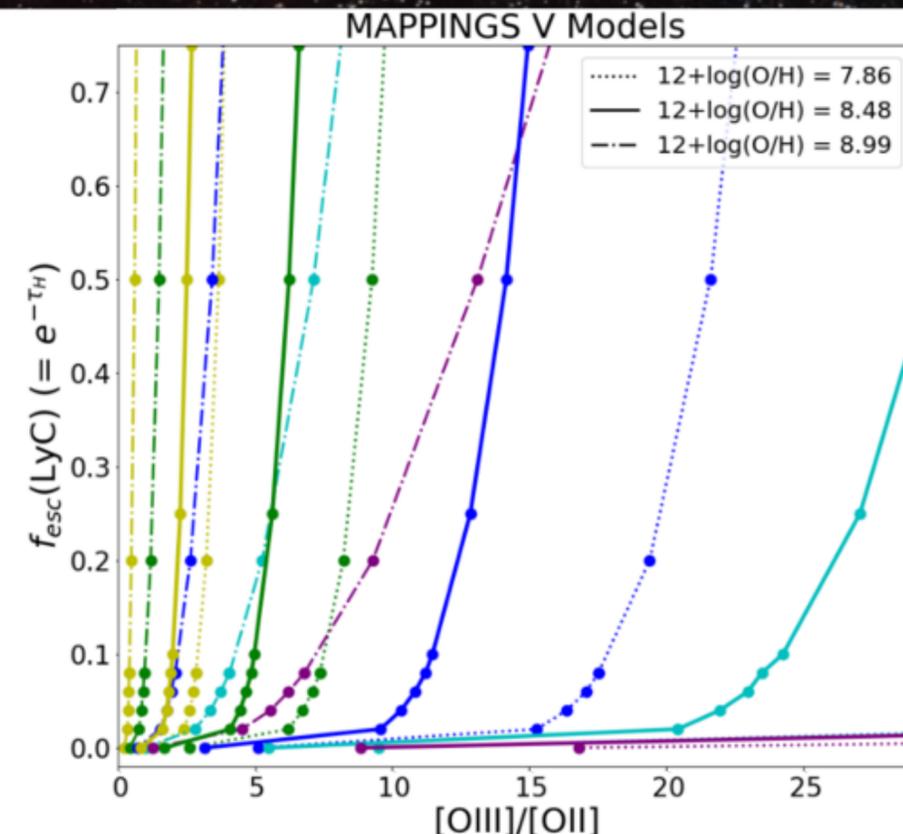
Similar to other high-z samples, the O32 ratio suggests a high ionization.

One galaxy, however, is more similar to the average SDSS value. This galaxy is a likely merger, and line ratios may be affected by shocks.



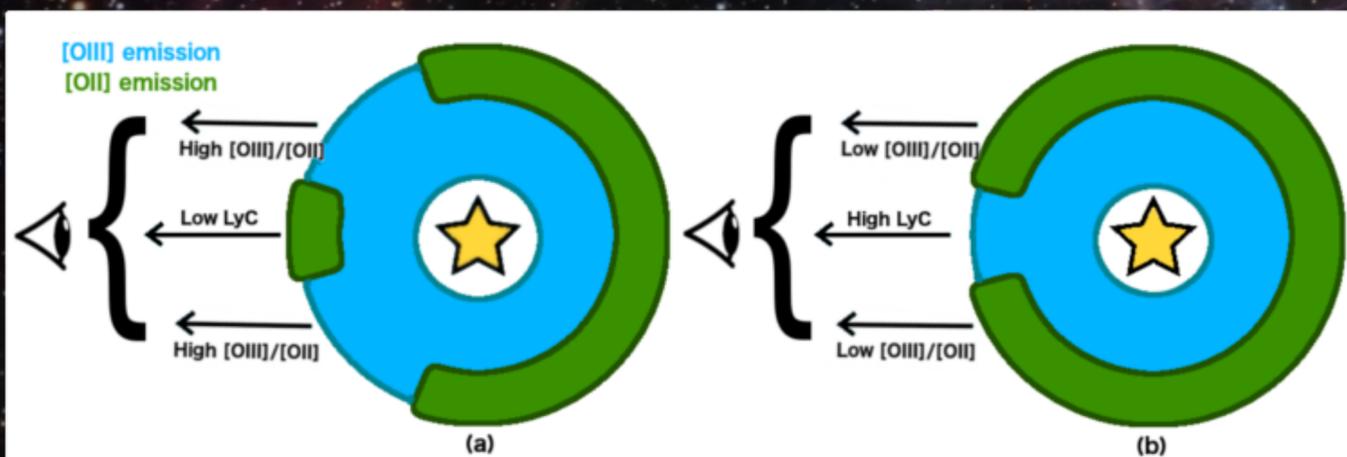
[OIII]/[OII] and LyC escape fraction (from photometry*) measured for sample.

Similar to recent low-z LyC emitters, our sample is at odds with suggested correlations



MAPPINGS V photoionization models can reproduce any combination of LyC escape fraction and [OIII]/[OII]

Models employ simple geometry...



Large variation in LyC escape fraction and [OIII]/[OII] can also be explained by complex geometrical effects

3D photoionization will be needed to explore this

(...or mergers?)

Image credit: R Jay GaBay

