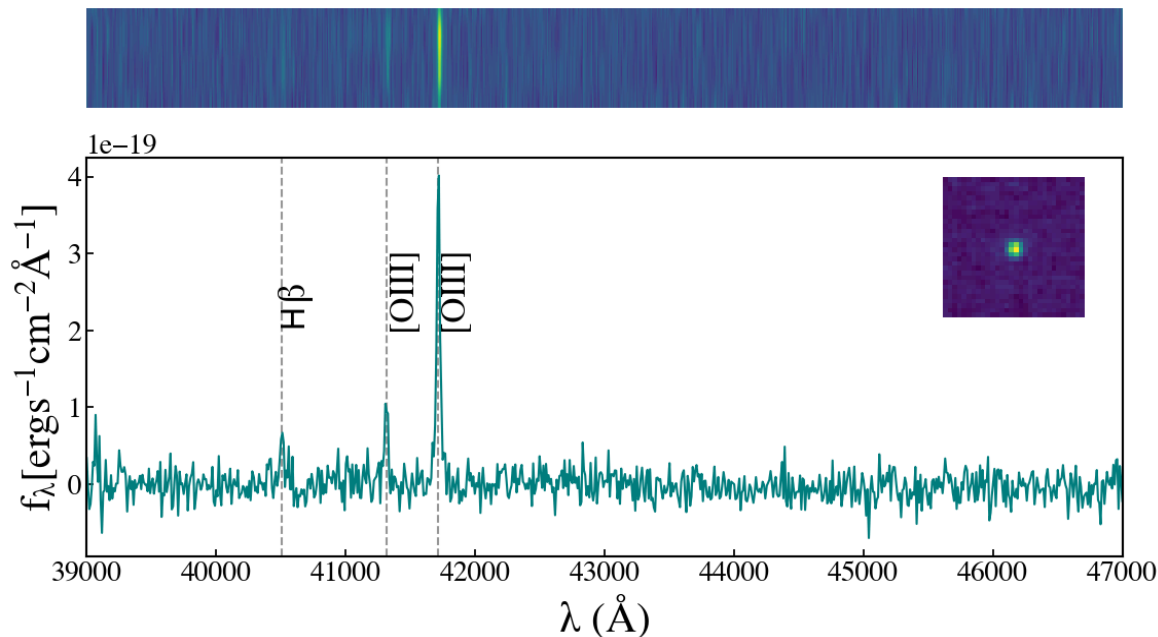


Jeyhan Kartaltepe just won another large JWST observing program to study high redshift galaxies, and she wants YOUR help analyzing the data!! WOW!!!

The wonderful Brittany Vanderhoof and Anika Kumar have already reduced the data from this NIRCcam WFSS survey, leaving you with some beautiful spectra and images to look at.

A) What is the redshift of this galaxy? (the rest wavelength of H-beta 4863 Angstroms)



Your best friend, Joe Cool, is secretly jealous of your cool new project and decides to secretly build a spectrograph in order to study these galaxies and scoop your exciting scientific findings.

Unfortunately for Mr. Cool, he does not have much money and therefore creates a spectrograph that focuses light onto an ordinary InSb detector. He plots and schemes a way to get his telescope up on Mauna Kea for one night of observing.

B) What is the maximum wavelength that one can detect with an InSb device?

C) What is the maximum redshift that Joe Cool will be able to detect H-beta?

D) Can he observe this galaxy and scoop your results? Is your friend Joe now Cool or Uncool?

