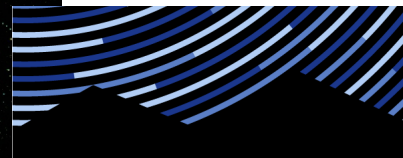
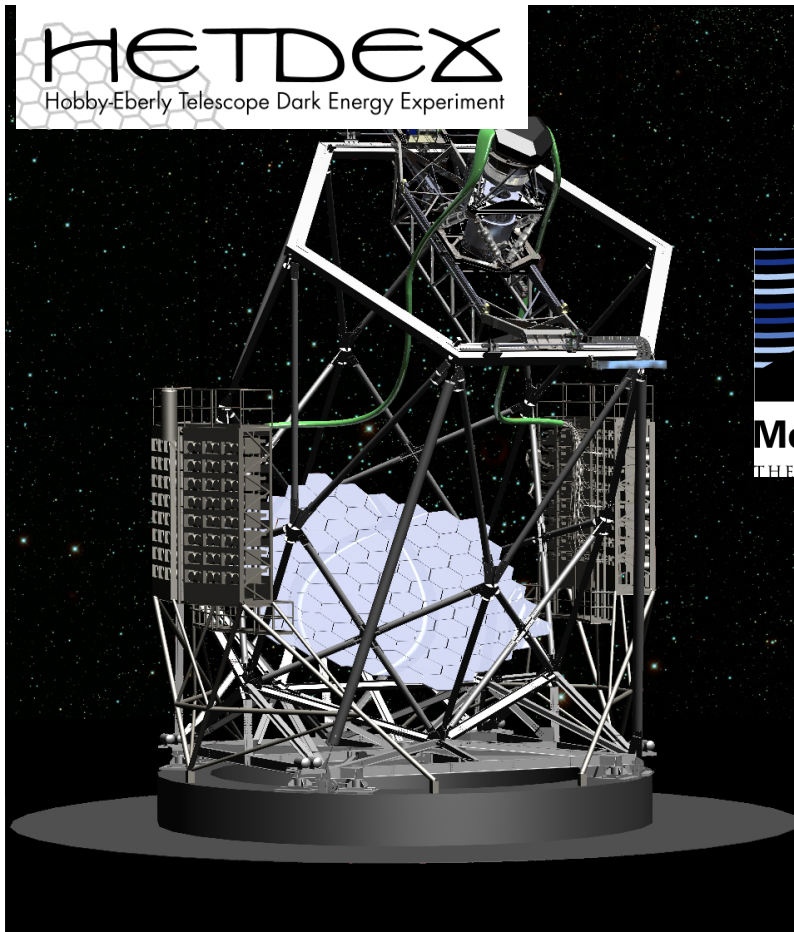


Today's application: **HETDEX**, an awesome survey that uses faraway galaxies to study **Dark Energy**.



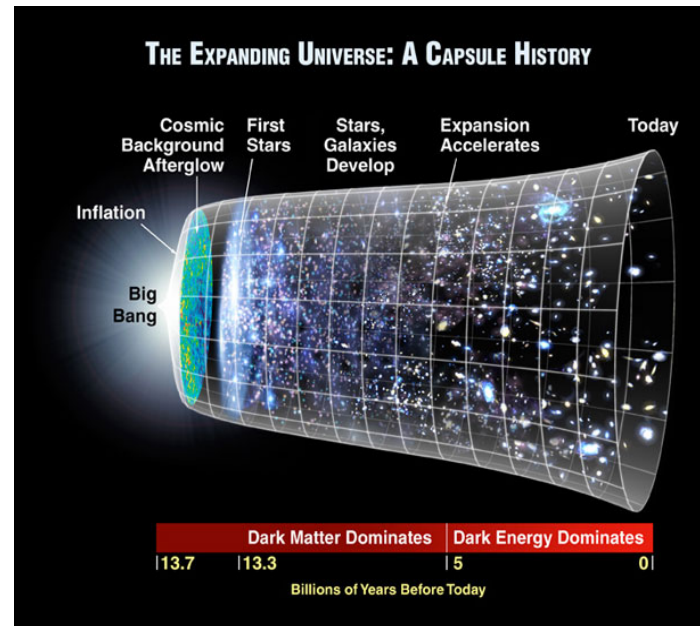
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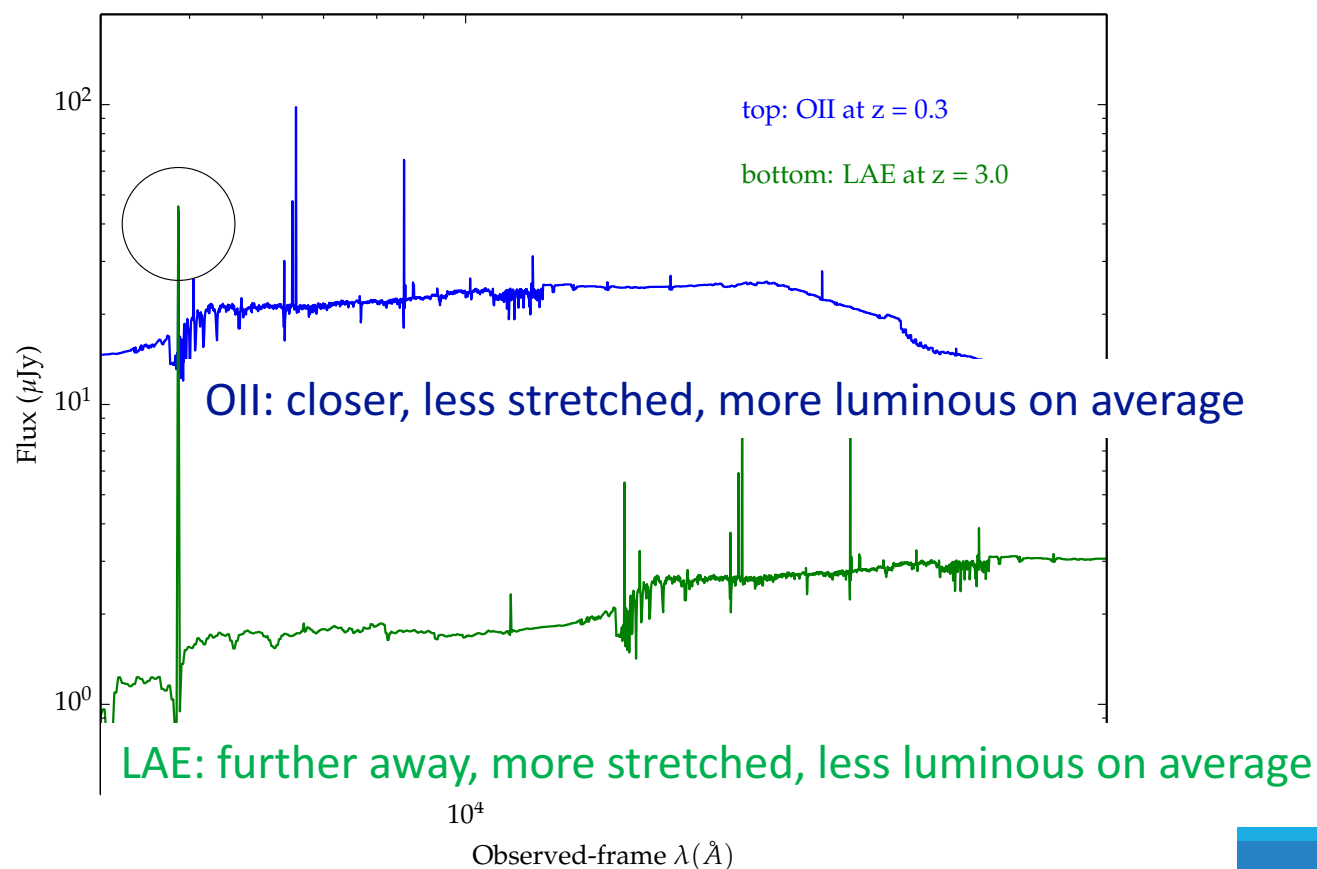
The goal of HETDEX is to test the behavior of Dark Energy at early times, confirming or falsifying the Cosmological Constant hypothesis.



This makes it necessary to ensure that we only select far away galaxies.

However, we will do the opposite 😊

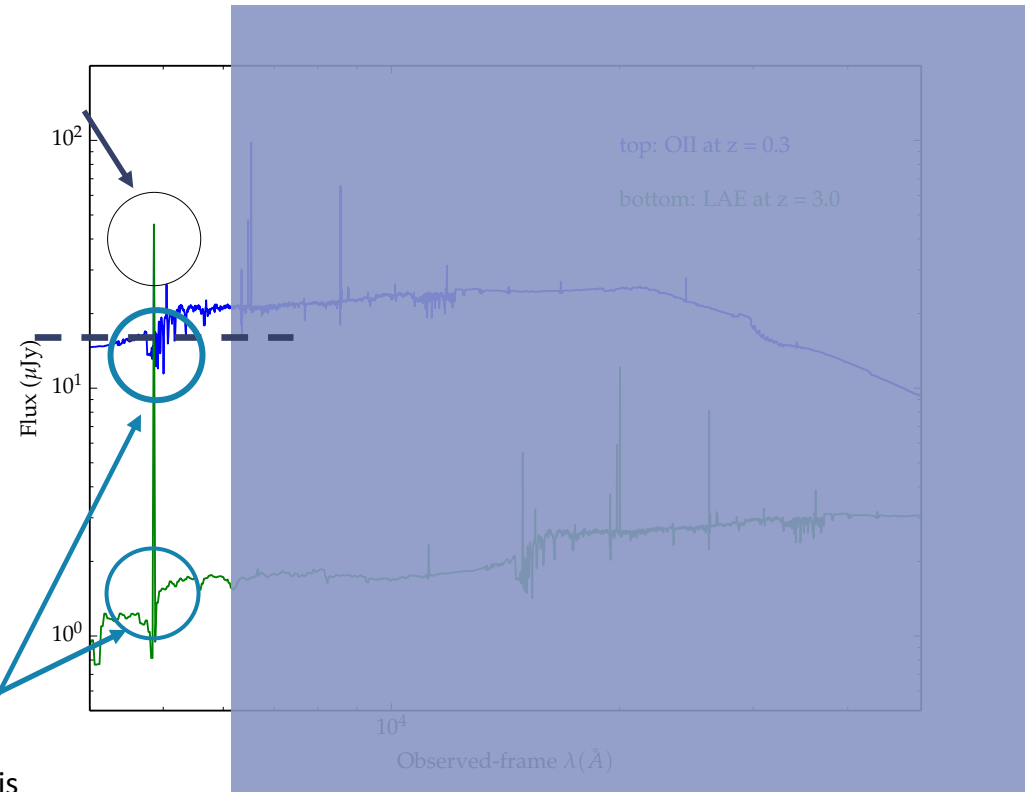
For HETDEX, the “choice galaxies” are Lyman Alpha Emitters or LAEs, and the main source of contamination are OII emitters.



What information do we have?

we measure this
(emission line flux)

we also measure this
(continuum)



We also know the wavelength at which the line is detected.

and we can build a ratio of EL/continuum called
EQUIVALENT WIDTH.