Towards Cosmology from Lyman-α Intensity Mapping in HETDEX Shun Saito (Missouri S&T)

What is HETDEX?

- BAO survey at 2<z<3.5.
- Blind detection of 1M LAEs.
- happing NOW! HDR1 on 4/1/19.



57/78 IFUs working!

As a Ly α Intensity Mapping Pioneer?

- Fully utilize the blind nature.



<u>Theoretical Challenge</u> Byrohl, SS et al. (2019)

- Ly α Radiative Transfer
- Diffusion induces a FoG effect.

