Extragalactic Science Discussion

Elephant in the room: PFS
- Need capabilities that they don’t have
- Has to be more than a redshift machine

Uniqueness
1. high res + low res
   - e.g., IGM mapping, tomography
2. H-band
   - observed-frame UV-optical @z~2.5 for galaxies & AGN
3. demanding observing
   - e.g., time domain
Extragalactic Science Discussion

to do in science case development:

- beef up & focus on H-band science
- integrate observing programs for galaxy, AGN, IGM science

“SDSS up to the peak of the build-up of stellar mass in the universe”

important specs:
  \[ R \approx 2000 \text{ in optical, } R \approx 3000-5000 \text{ in NIR} \]
  need to operate at relatively high airmass to take advantage of synergies LSST, SKA, etc.

cost-saving ideas:
  - non-simultaneous J&H coverage
  - 1.2” fibres

key enhancements (2\textsuperscript{nd} generation): IFU, OH suppression