

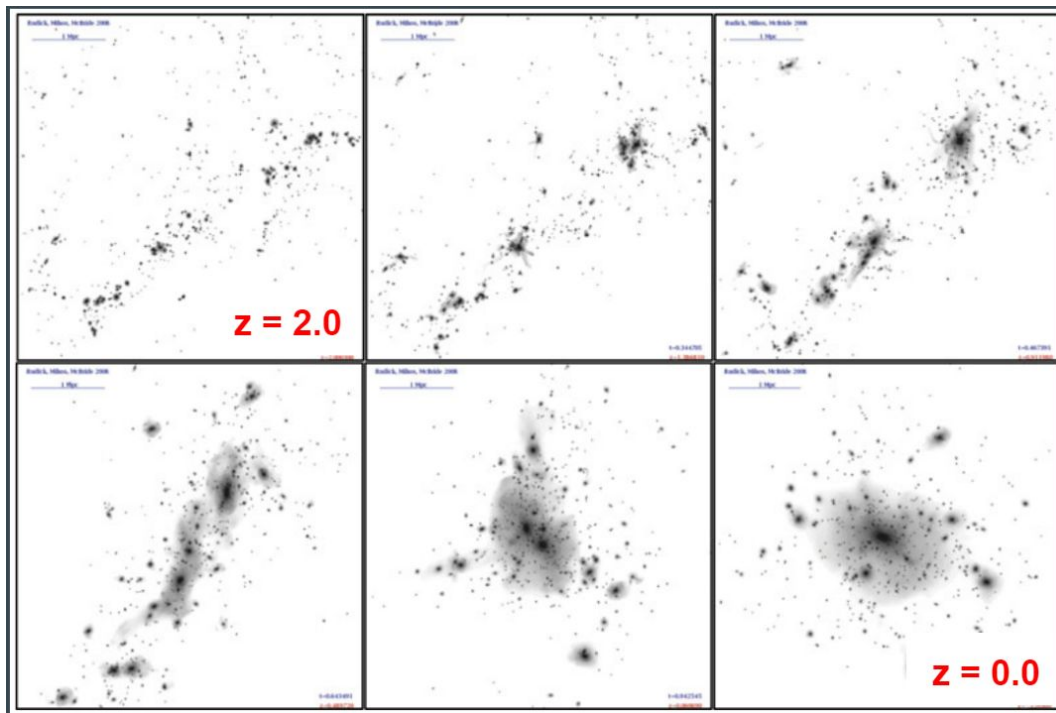
Exploring $z > 6$ with LSST + NIR data

- LSST deep fields combined with NIR will allow the detection of 1000s of $z > 6$ LBGs
- NIR selection is required, with forced photometry on LSST
- Could be done on early data, at least for the bright objects (NIR data is much shallower)
- Preparation - need realistic number counts of galactic brown dwarfs to simulate contamination, size measurements may help

Environmental Impacts on Galaxies

Low Surface Brightness Astron.

e.g.: LSB Galaxies, Stellar Haloes and Intracluster Light:



- Extremely faint ($\mu_V > 28.5$ mag arcsec⁻²)
- < 1% brightness of the night sky
- Stars bound to cluster potential
- Extends ~hundreds kpc
- Diffuse / irregular web
- Hierarchical accretion
→ $z = 0$
- ~10-20% cluster light/mass

$10^{15} M_{\odot}$ cluster

N-body, collisionless

Lum particle mass: $\sim 10^6 M_{\odot}$

Mihos (2016), adapted from Rudick et al. (2011)