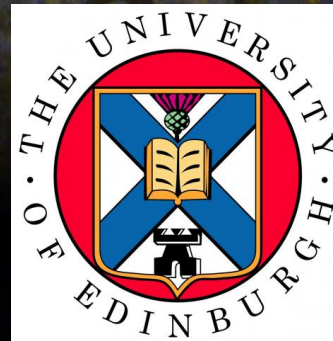


ONGOING ASSEMBLY OF ETGS IN HVDF12

in the context of massive galaxy evolution

Fernando Buitrago

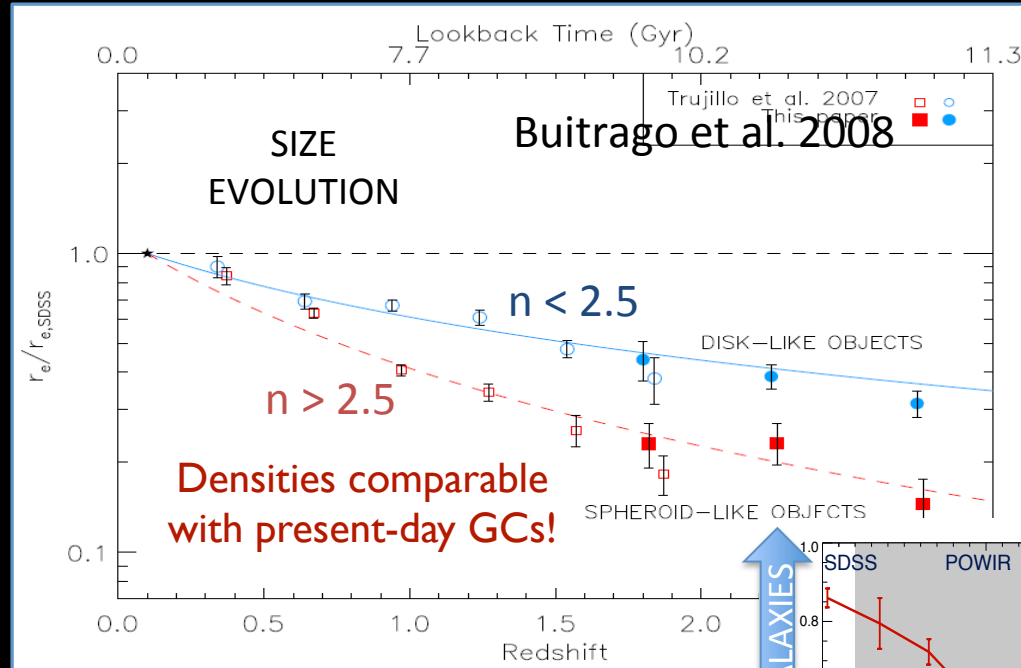
In collaboration with: M. Montes-Quiles, I. Trujillo,
J. Dunlop, R. McLure, C. Conselice



MASSIVE GALAXY EVOLUTION

$$M_{\text{stellar}} > 10^{11} M_{\odot}$$

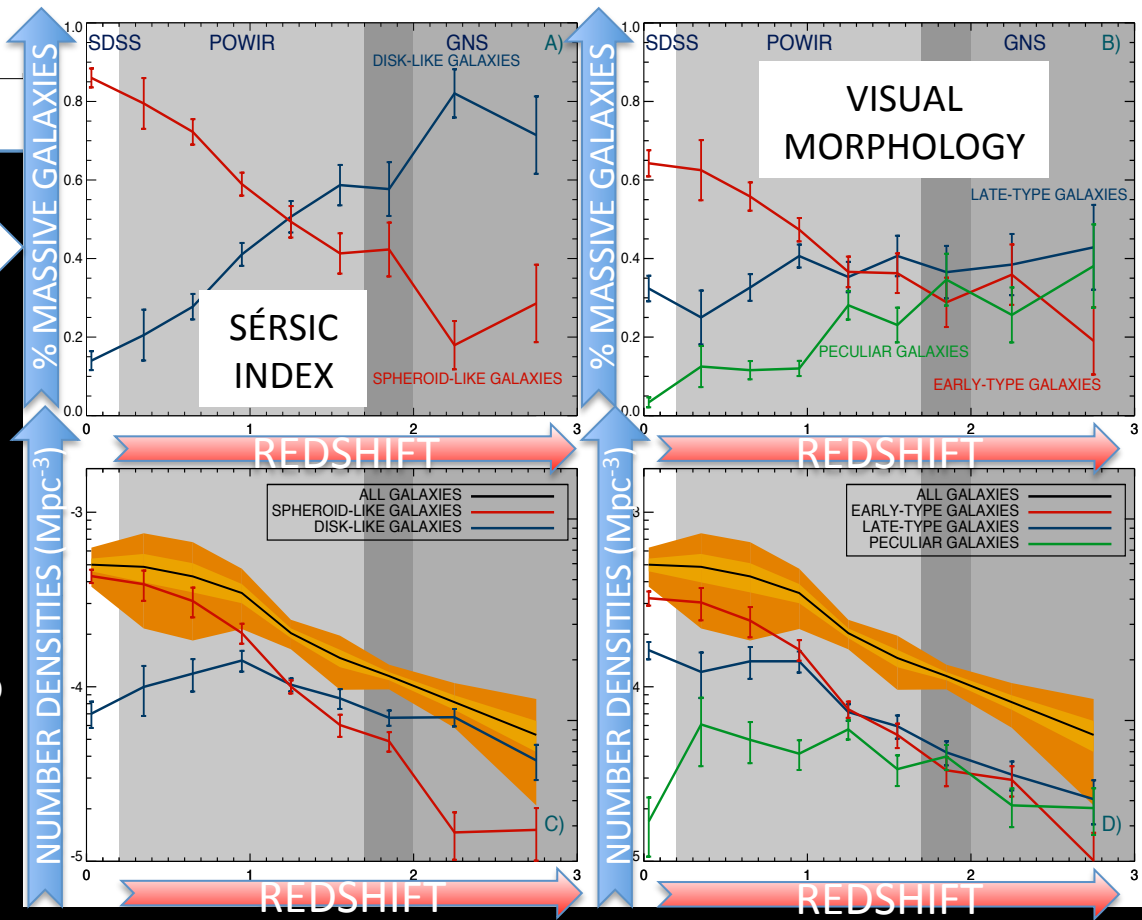
See also Bruce et al. 2012 or Van der Wel et al. 2013 in prep for latest CANDELS results



Buitrago et al. 2013

What drives these dramatic changes?

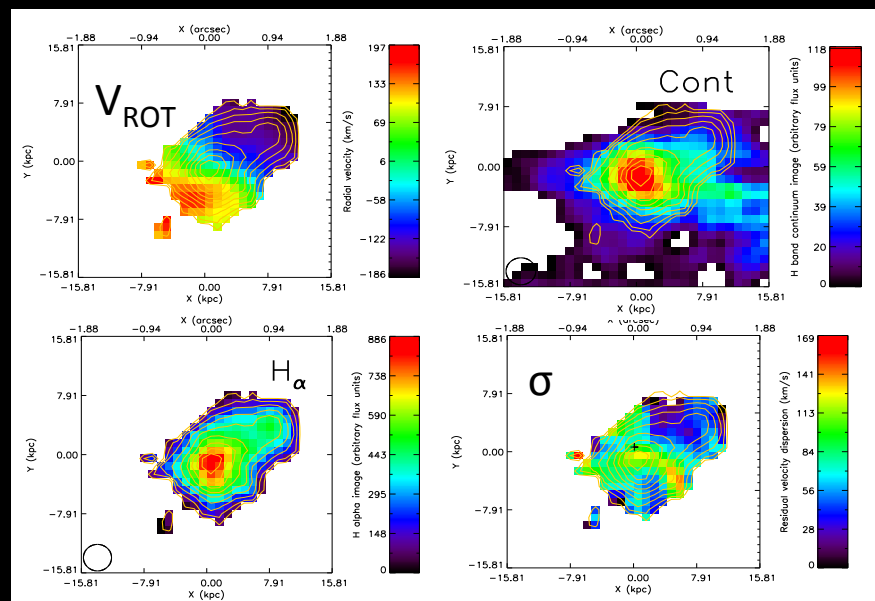
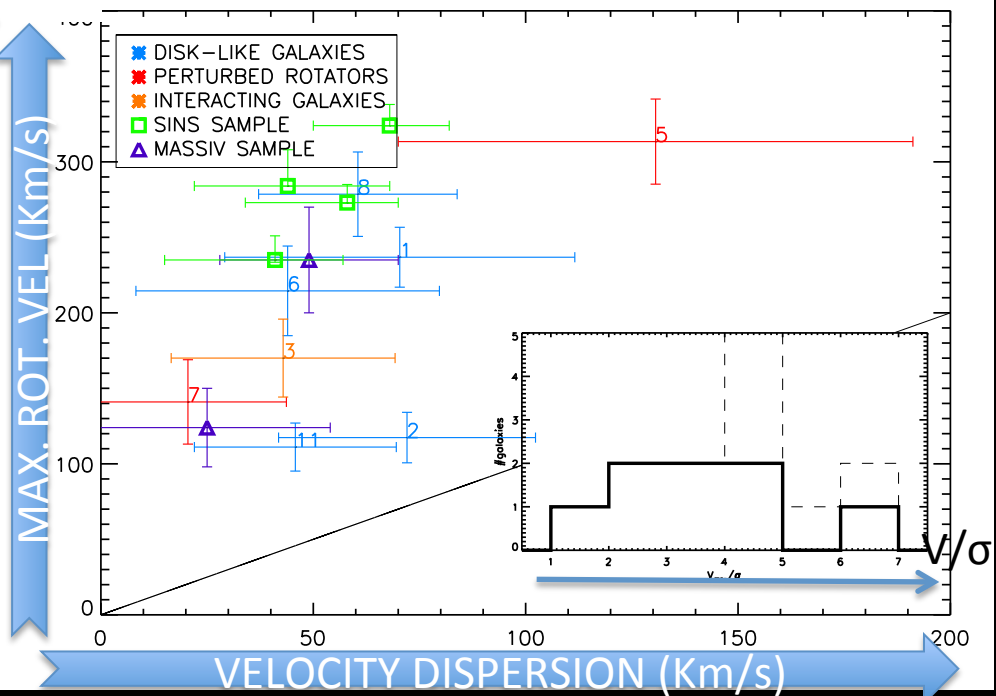
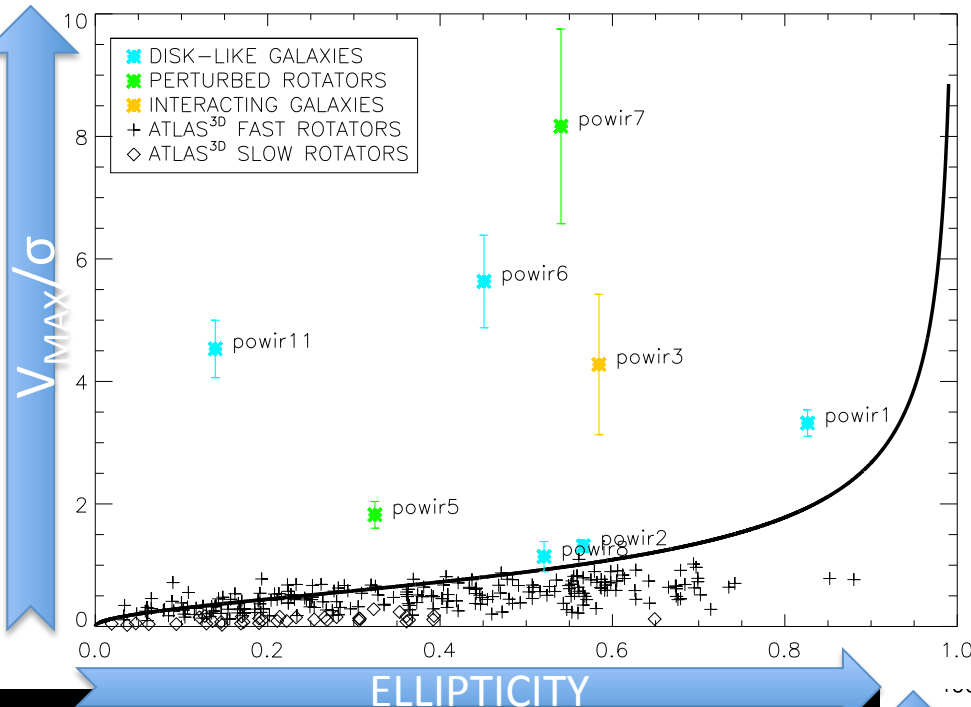
- Are quenching and morphology related? (McLure et al. 2012)
- AGNs able to do the job (Maiolino et al. 2013) but look incompatible (Trujillo et al. 2011)



QUENCHING ALONG WITH THE TRANSFORMATIONS

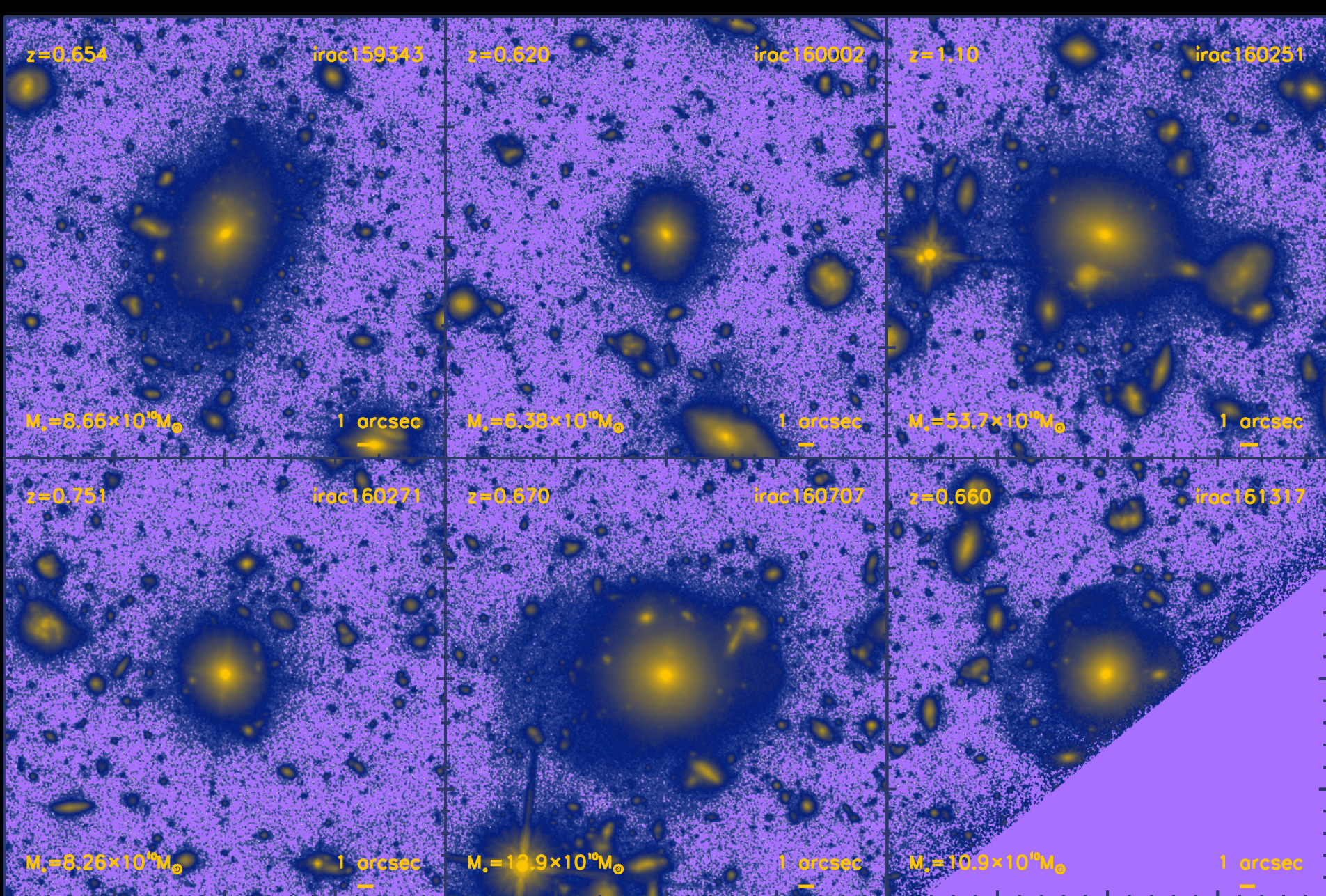
BUITRAGO ET AL. 2013 (arXiv: 1305.0268)

- $z=1.4$ (DEEP2 spectra)
- K-band selected POWIR survey
- SINFONI@VLT
- Modelling according Epinat et al. (2010)
- See also Chang et al. 2013

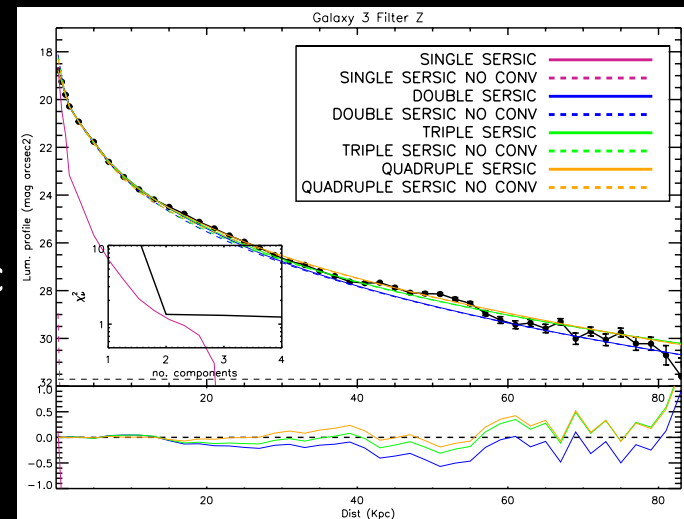
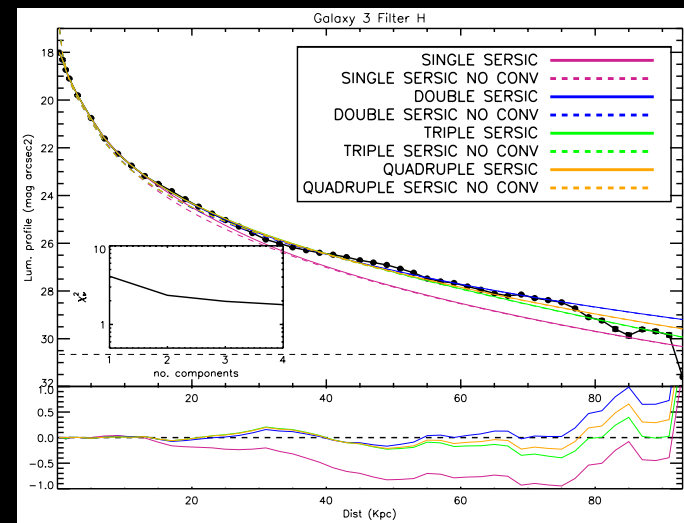
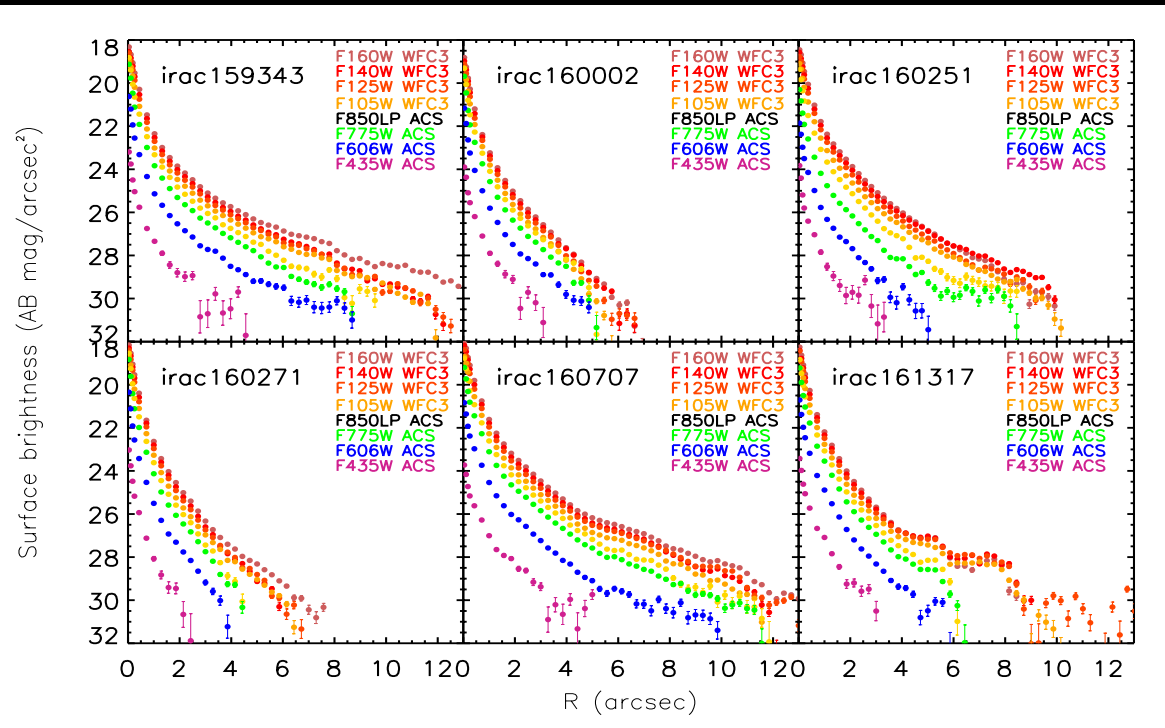




HUDF12
Ellis et al.
2012
Koekemoer
et al. 2012



Mag. range displayed is 18-30. Masses assuming Salpeter IMF



- “Touching from a distance” – Up to $20 r_e$ or ~ 100 Kpc
- Stellar populations characterization (age, Z)
- Inside-out growth
- Quenching mechanism should explain morphology or at least not to interfere
- Red nuggets are not so quiescent & dead as people previously thought
- Massive galaxies: from starforming disks at high- z to big early-types in the local Universe