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*Tidal effects in groups and
the Fornax cluster*



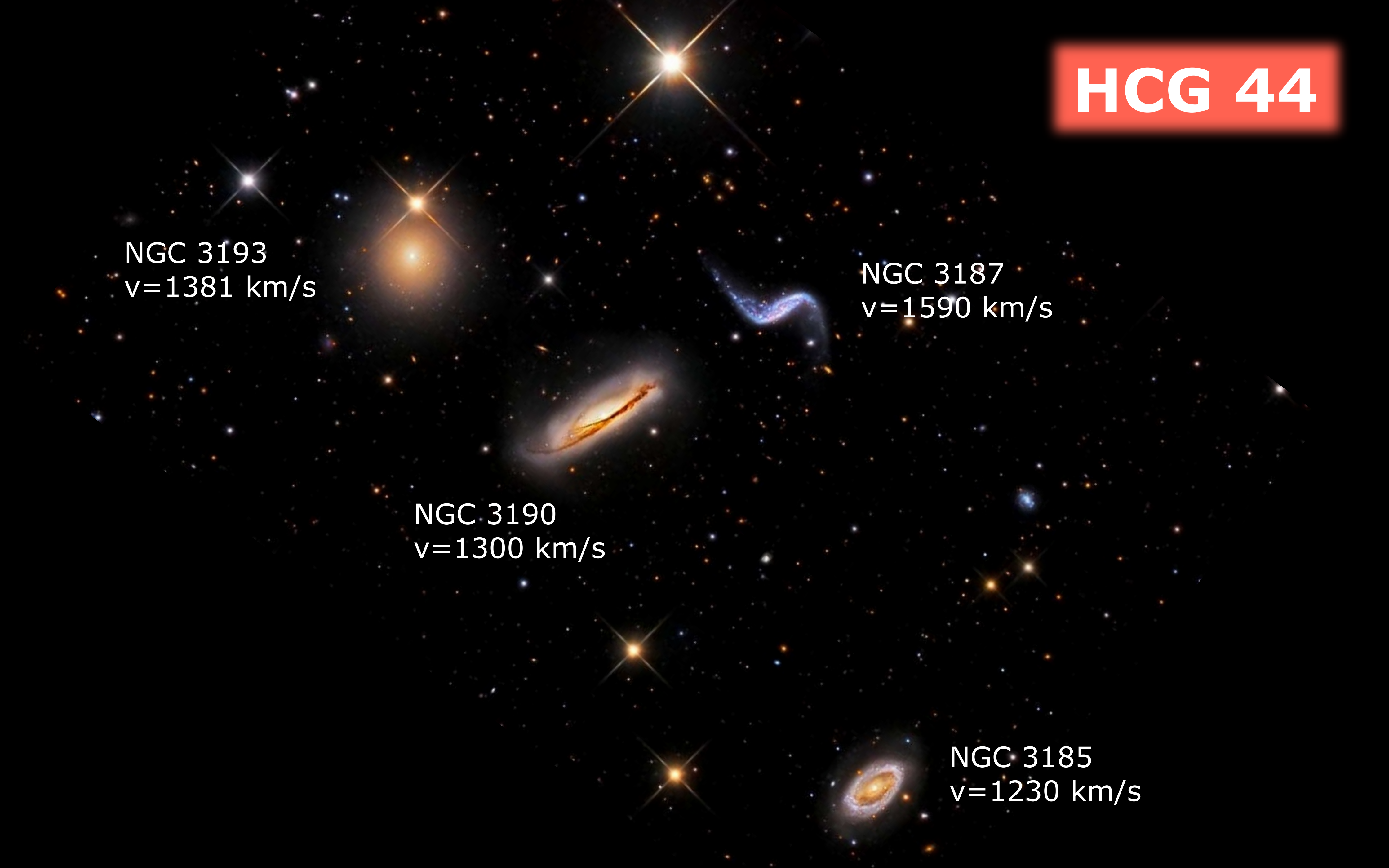
HCG 44

NGC 3193
v=1381 km/s

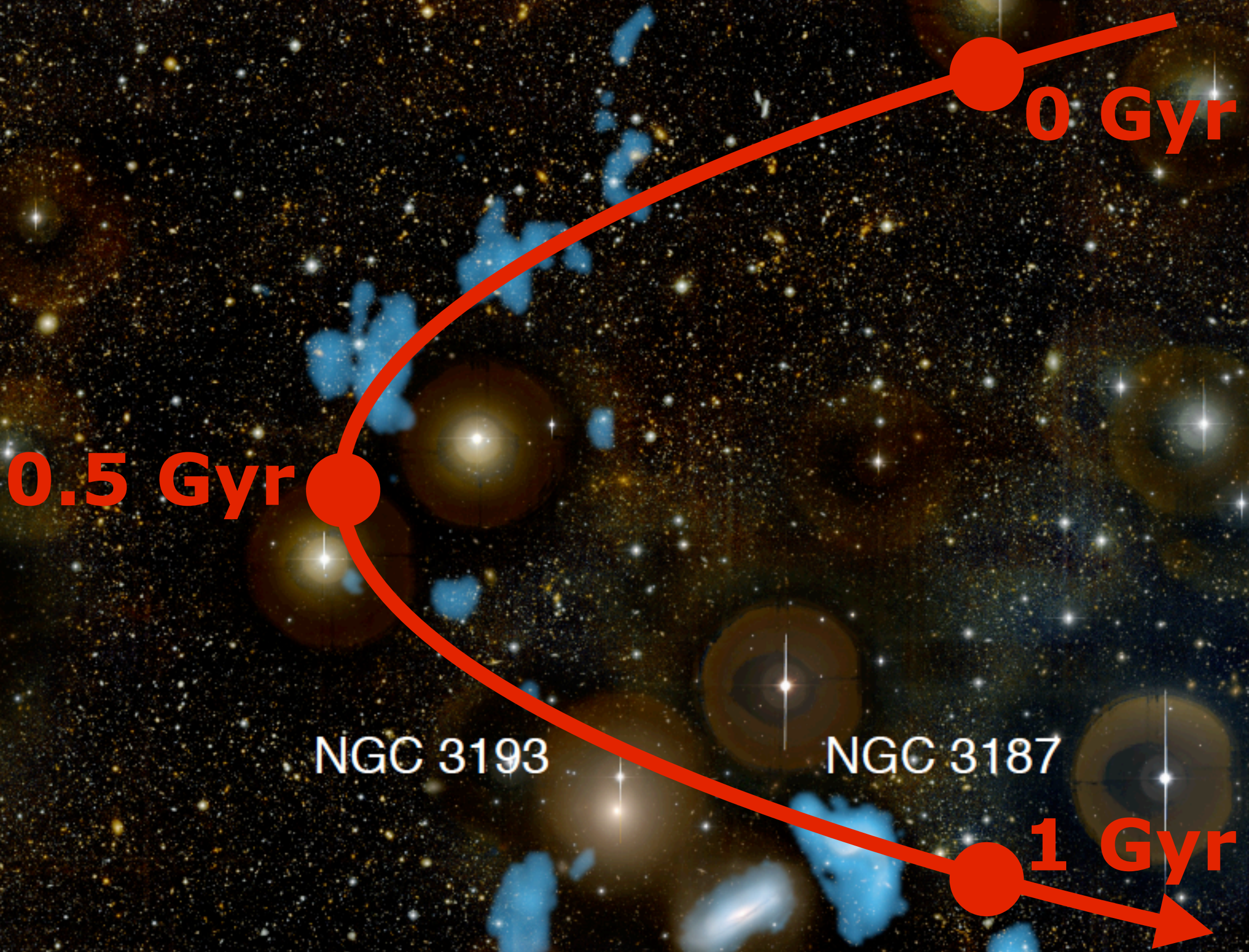
NGC 3187
v=1590 km/s

NGC 3190
v=1300 km/s

NGC 3185
v=1230 km/s

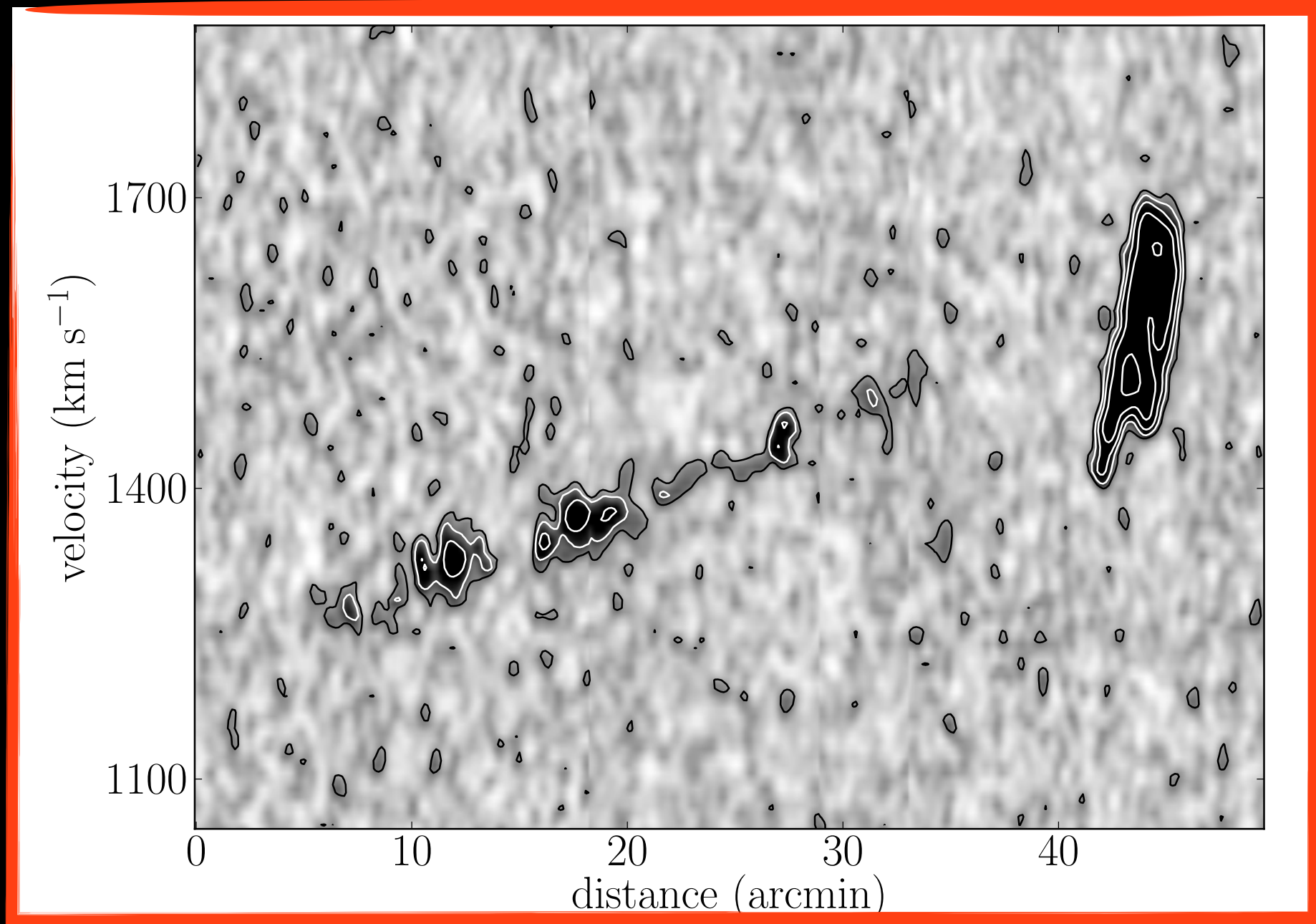


Serra et al. (2013)



~300 kpc tail
 $M(\text{HI}) = 5 \times 10^8 M_{\odot}$

Parabolic orbit model:
NGC 3187 stripped of 1/3 of its HI by the group tidal field in ~ 1 Gyr
(as in Bekki et al. 2005)
see also Leisman et al. (2016) and Hess et al. (2017)



ASKAP & APERTIF



Fornax

- $7 \times 10^{13} M_{\odot}$ @ 20 Mpc

Compared to Virgo

- $M \sim 1/10$
- $\rho_{\text{ICM}} \sim 1/2$
- $\sigma_{\text{gal}} \sim 1/2$
- $n_{\text{gal}} \sim 2$

MeerKAT Fornax Survey

12 deg² ~ 2 Mpc²

$N(\text{HI}) \sim 10^{19} \text{ cm}^{-2}$ @ 1 kpc

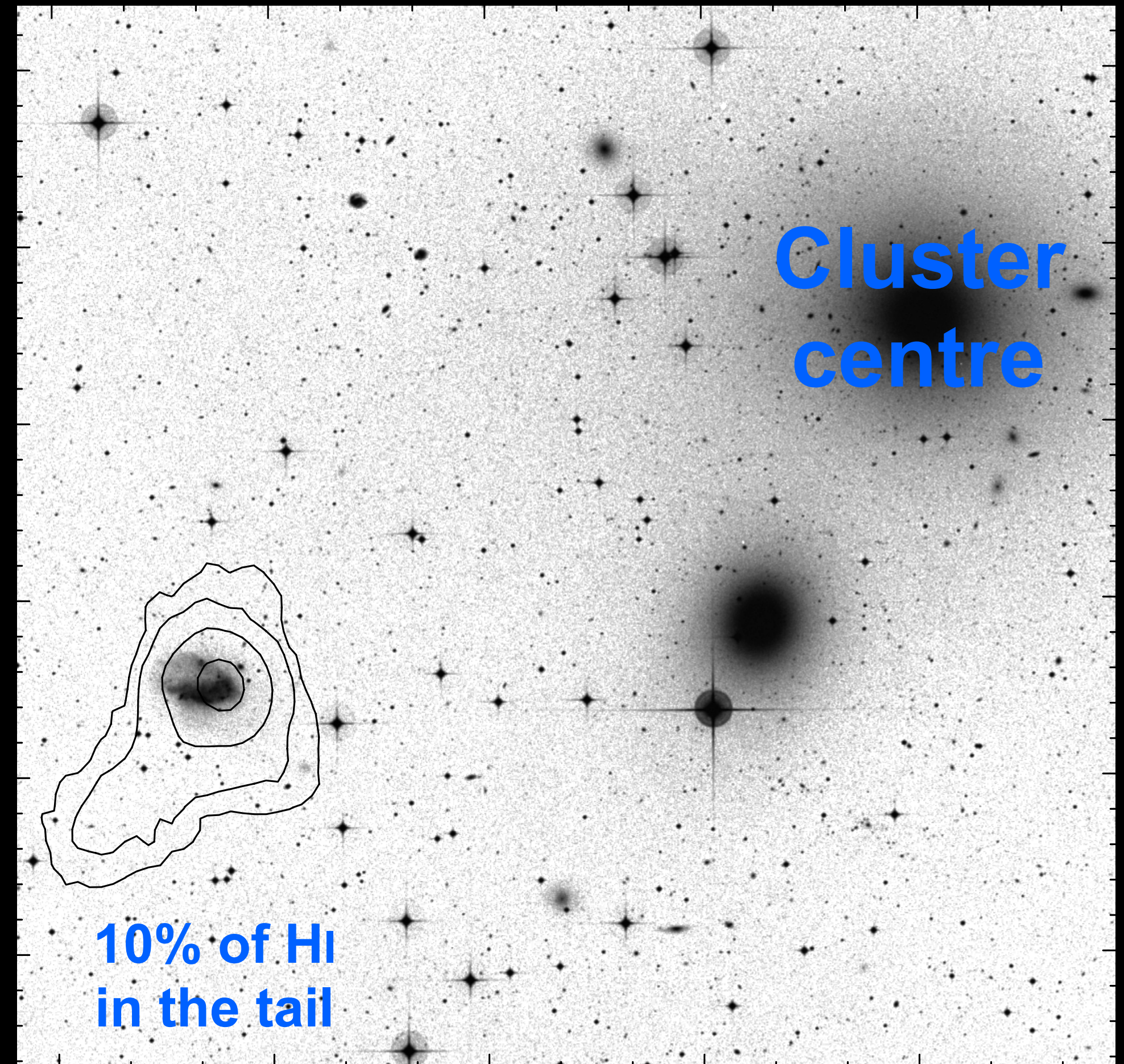
$N(\text{HI}) \sim 10^{18} \text{ cm}^{-2}$ @ 10 kpc

$M(\text{HI}) \sim 5 \times 10^5 M_{\odot}$

NGC 1427A

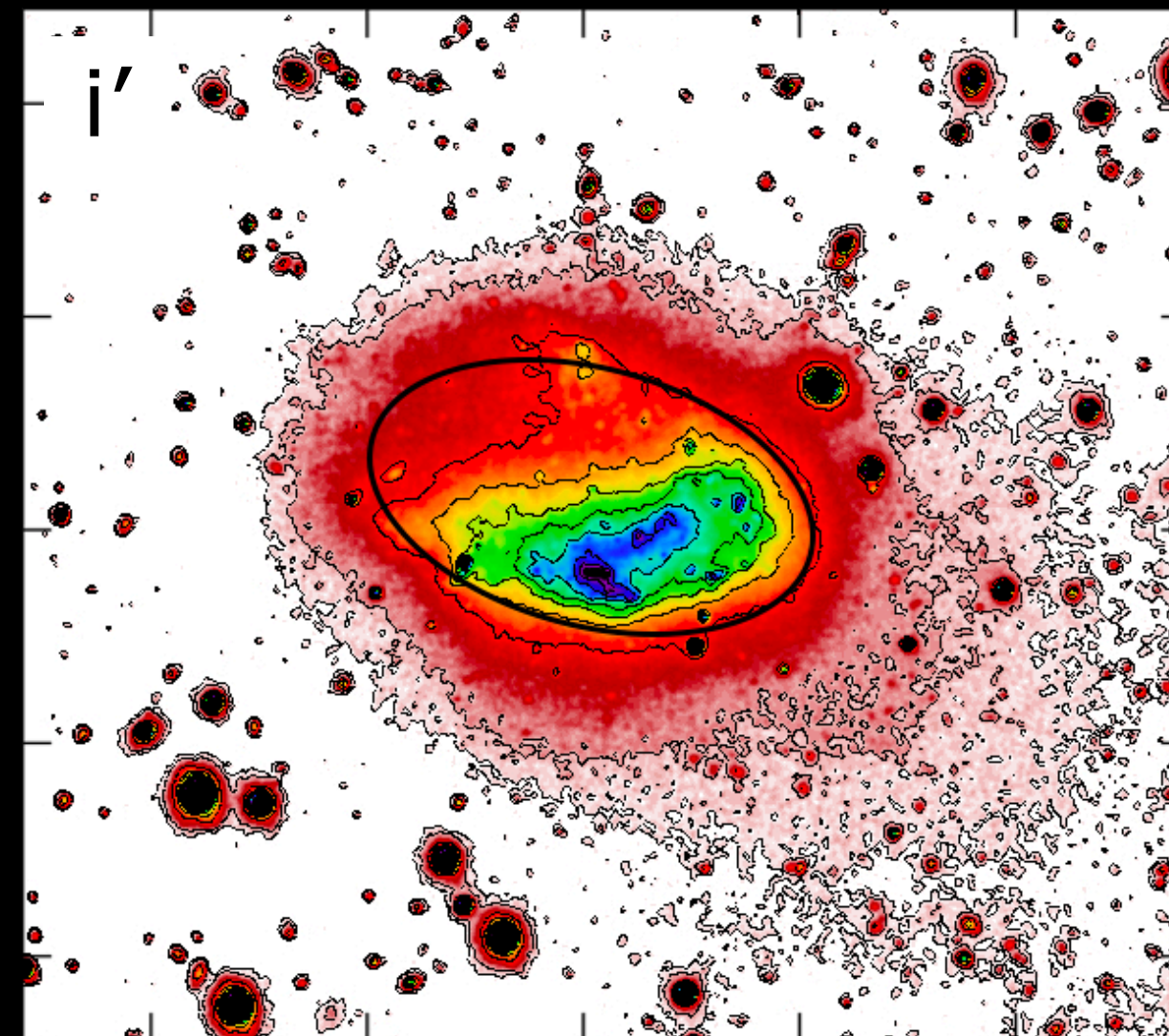
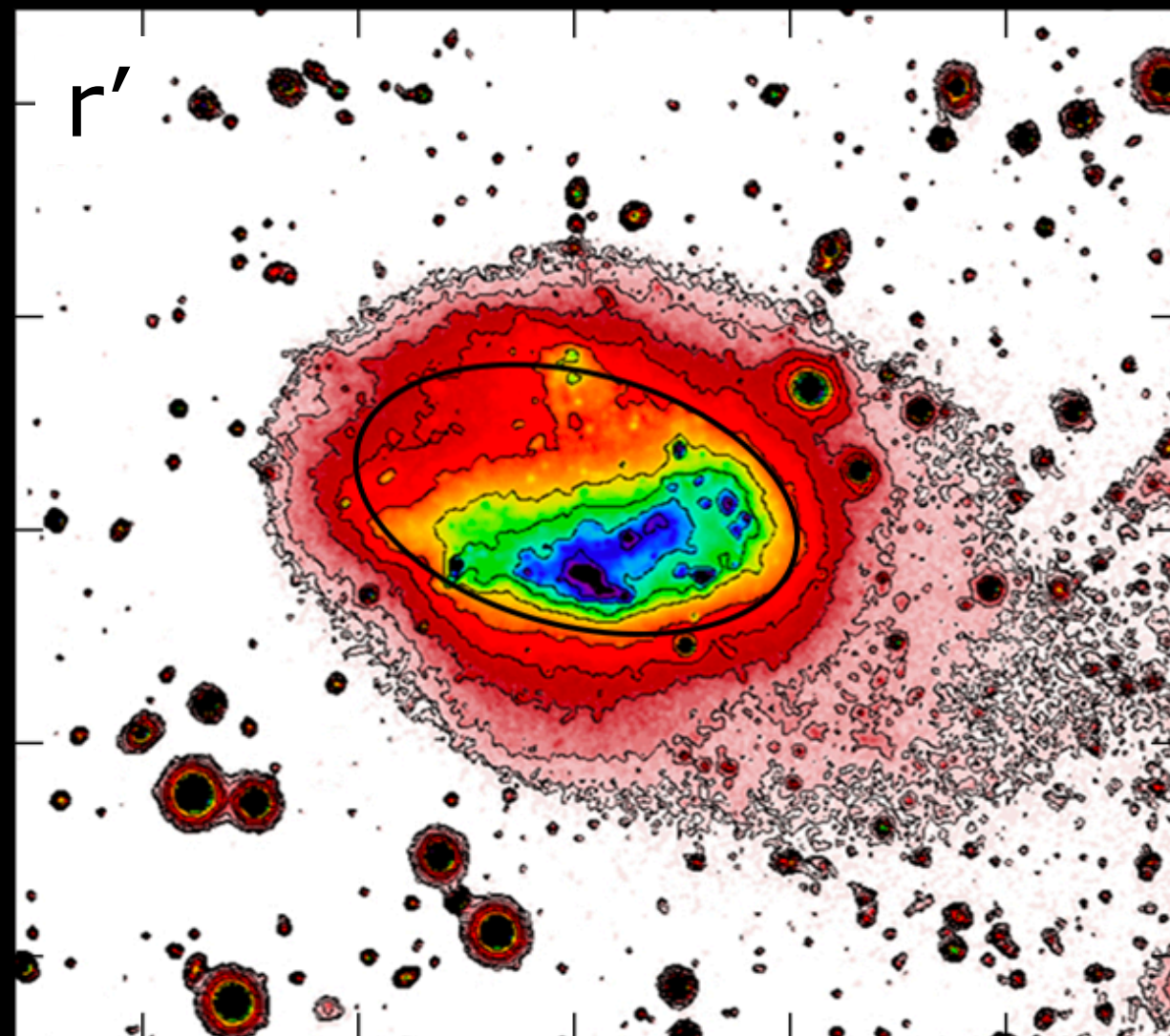
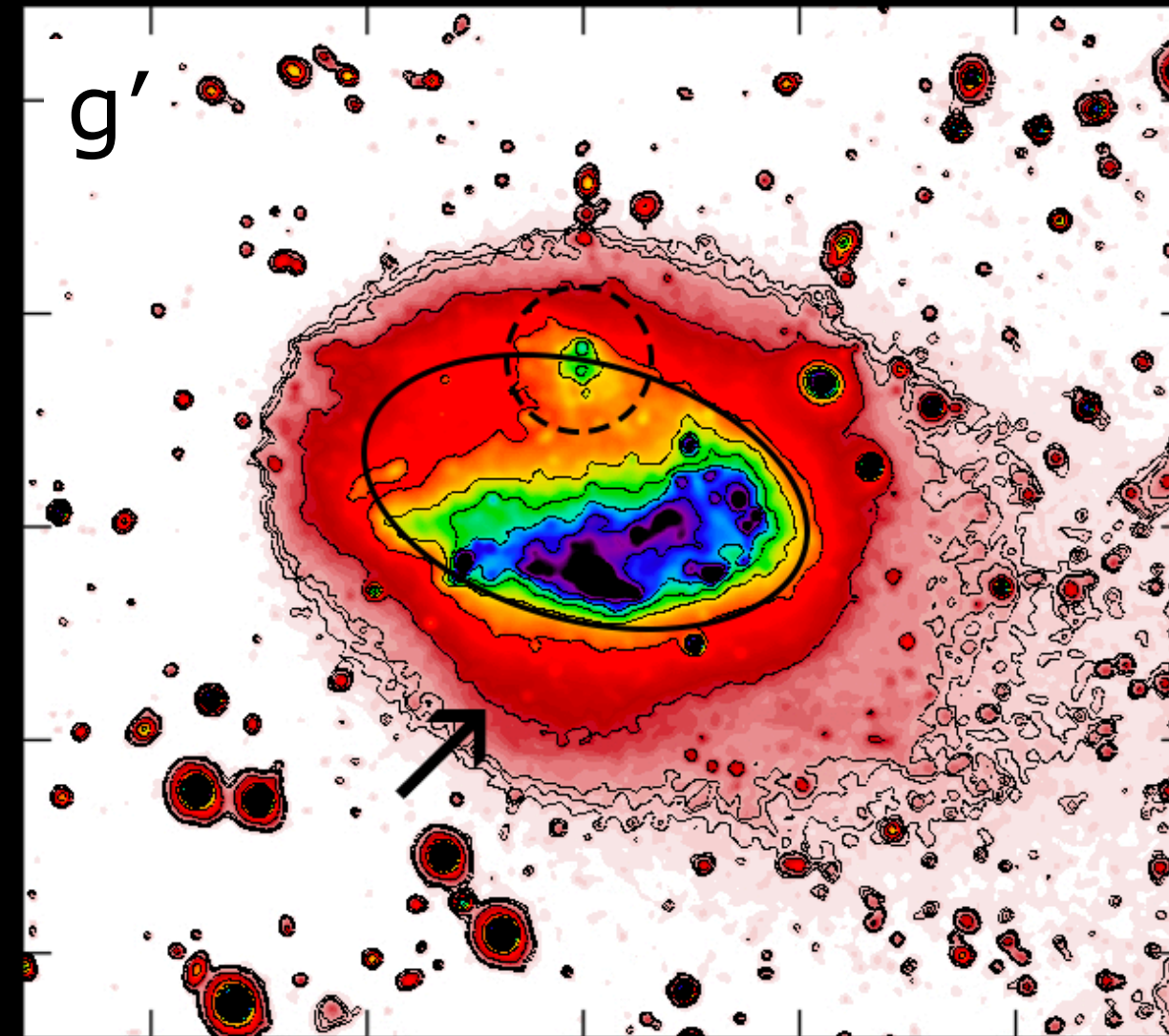
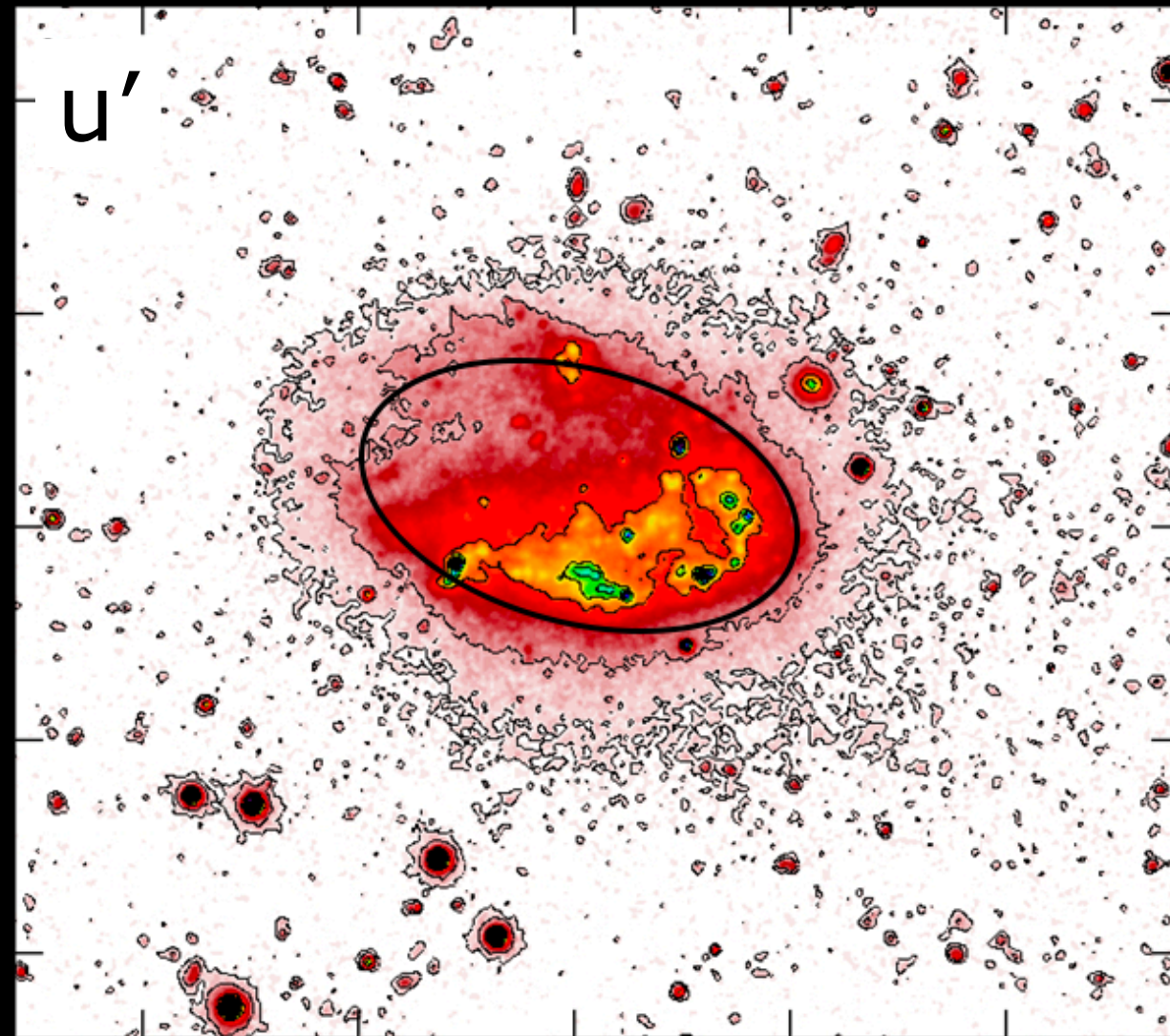


Hilker+ 97,05; Chaname+ 00;
Gregg+ 03; Mora+ 15



Lee-Waddell et al. (2018)

VST image from Fornax Deep Survey (P.I.'s Peletier, Iodice)





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