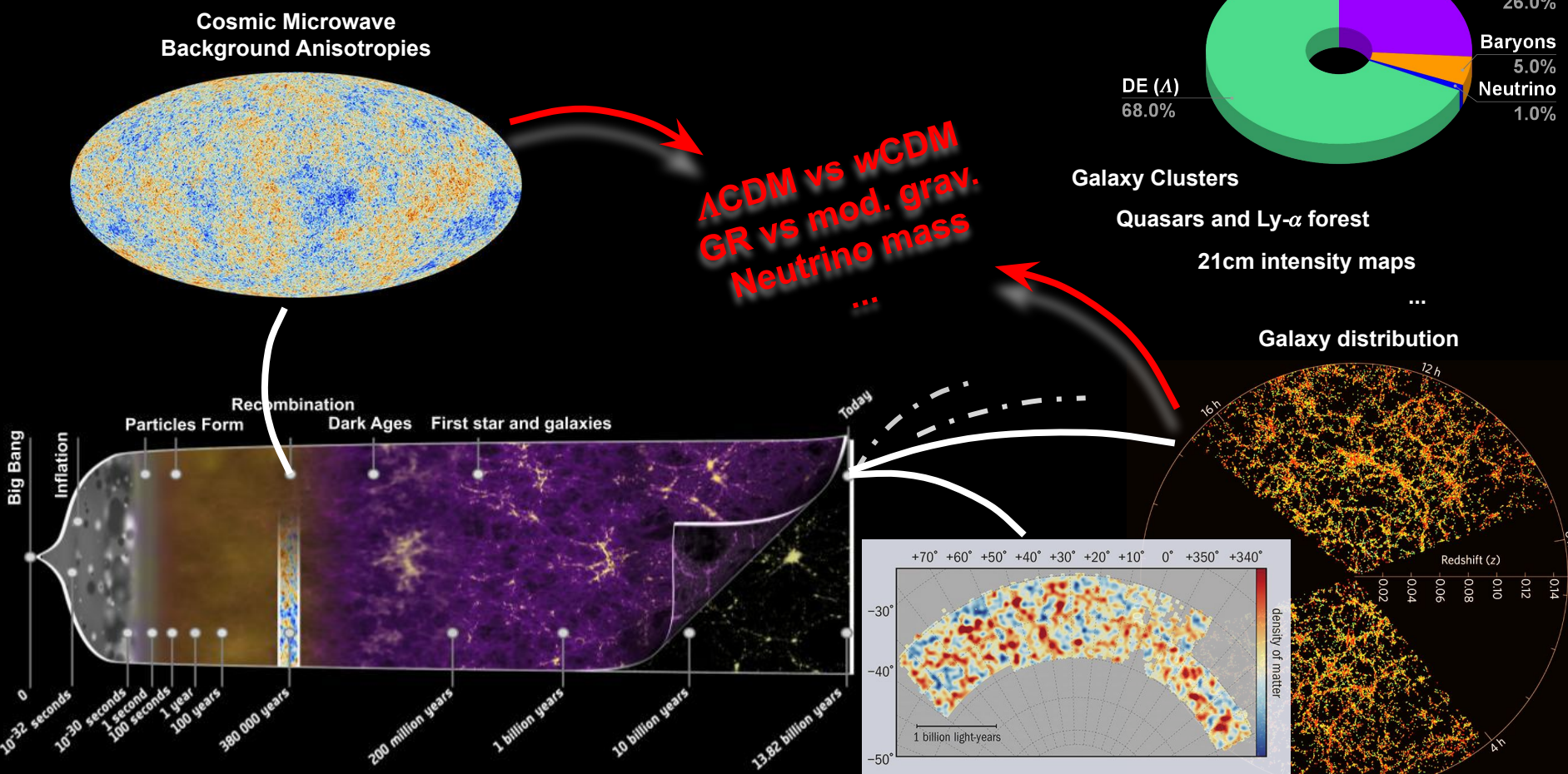


Precision Cosmology & Large Scale Structure Probes



Credit: esa.int

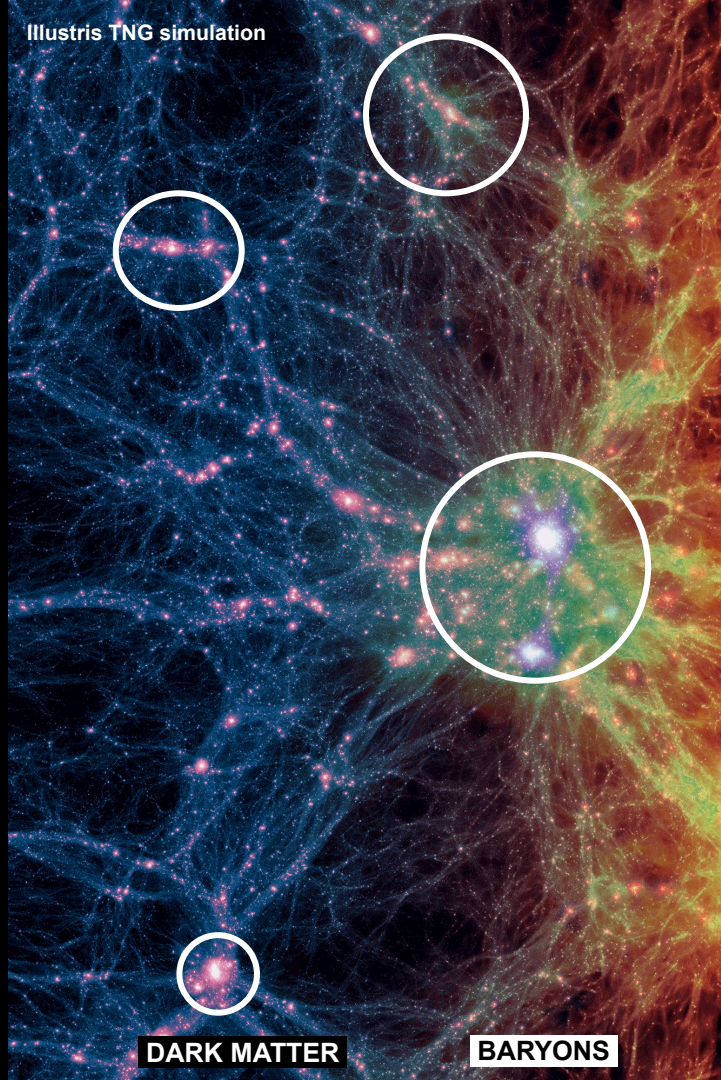
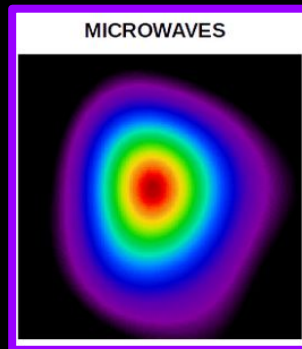
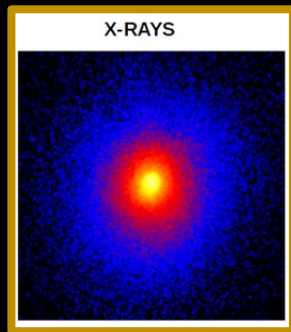
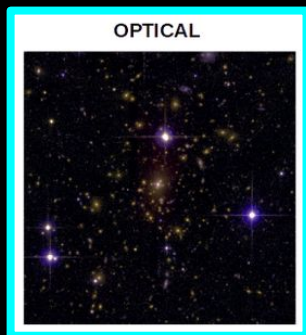
GALAXY CLUSTERS AS COSMOLOGICAL PROBES

Most massive bound systems in the Universe:

$M \approx 10^{13} - 10^{15} M_{\odot}$ and $R \approx 1 - 5$ Mpc

Multi-component systems

Galaxies and stars (~5%), ICM (~15%), DM (~80%)

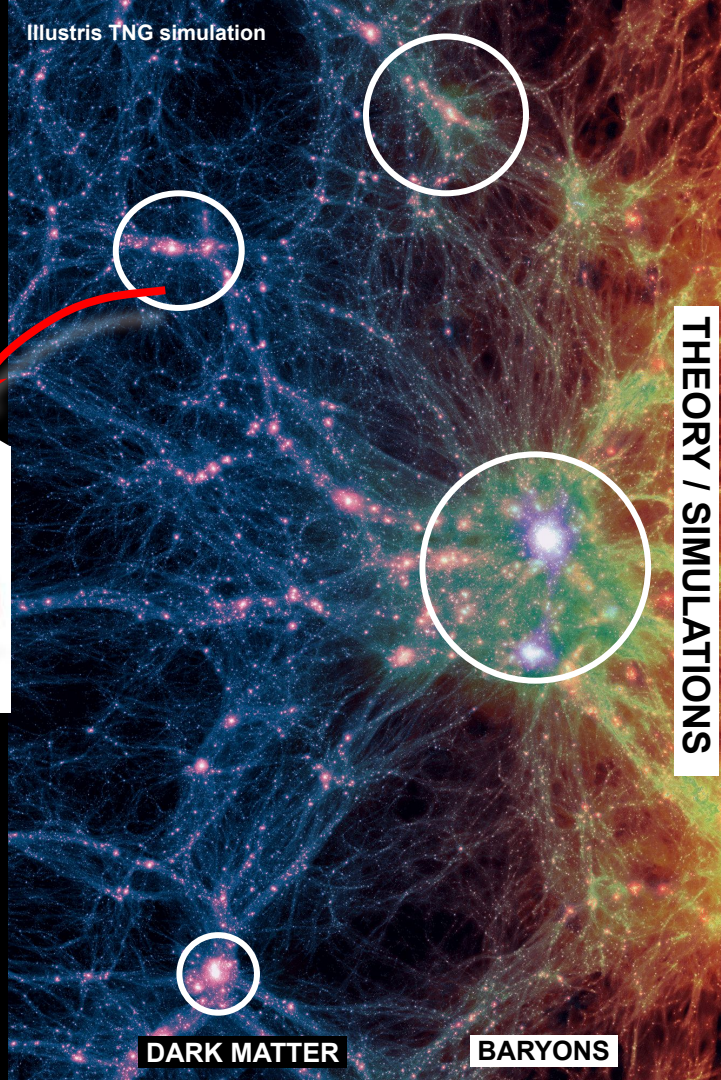
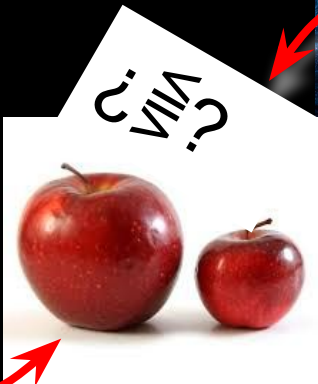
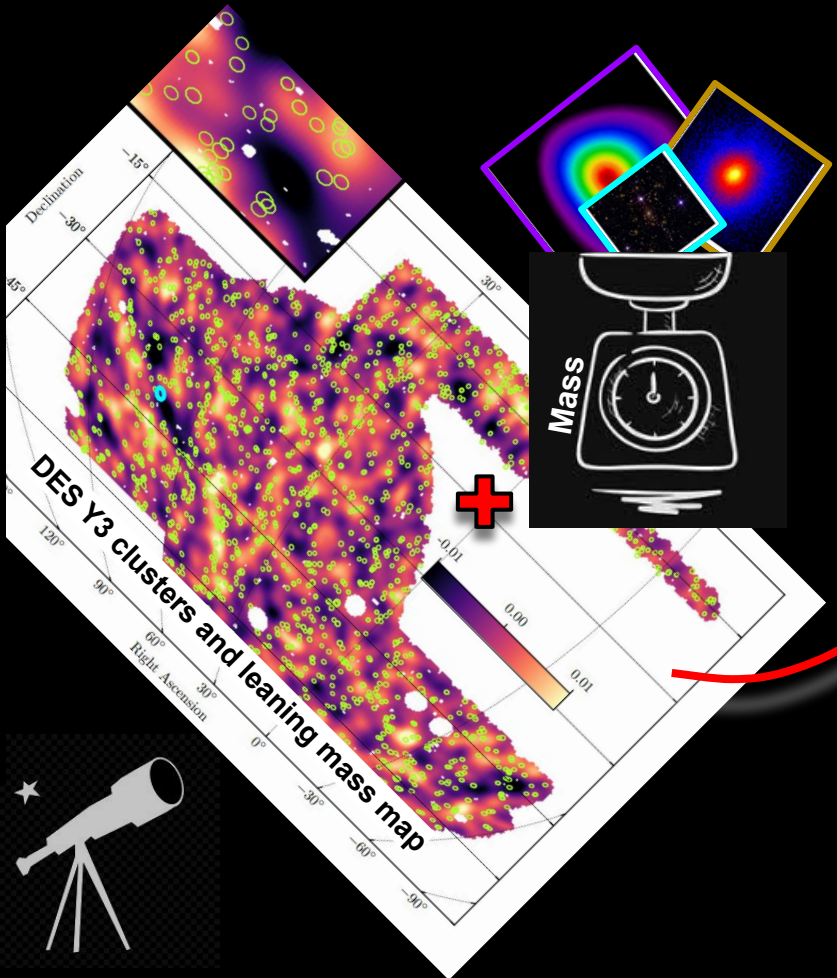


GALAXY CLUSTERS AS COSMOLOGICAL PROBES

Illustris TNG simulation

THEORY / SIMULATIONS

OBSERVATION



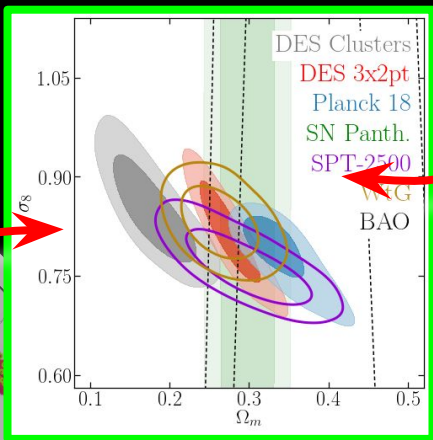
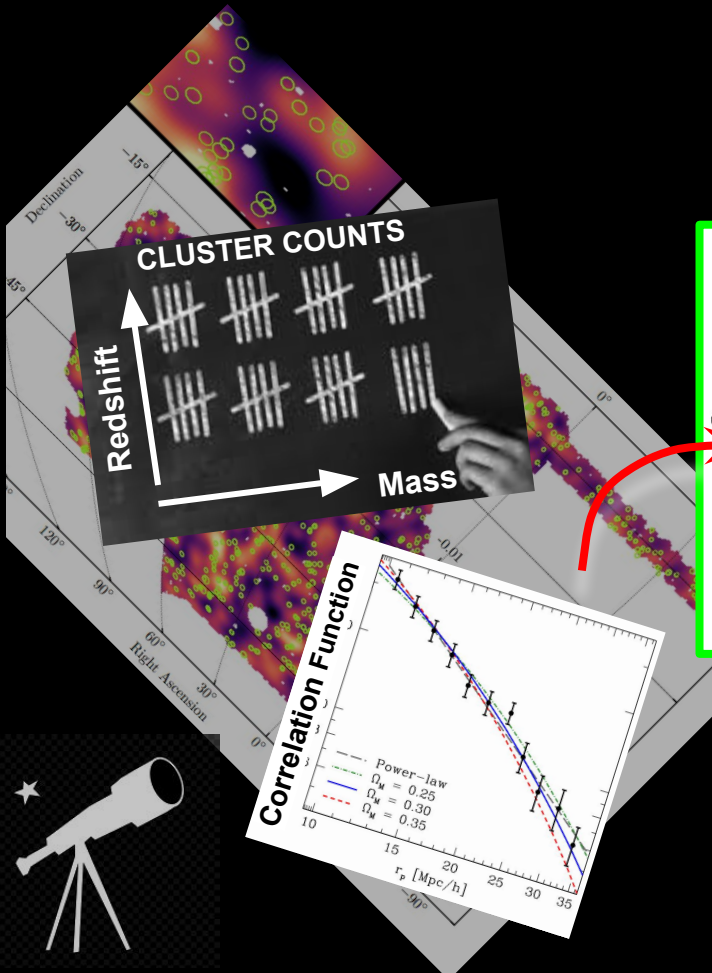
DARK MATTER

BARYONS



GALAXY CLUSTERS AS COSMOLOGICAL PROBES

OBSERVATION



Illustris TNG simulation

