



A Ram-Pressure Stripping Model for All the Galaxies

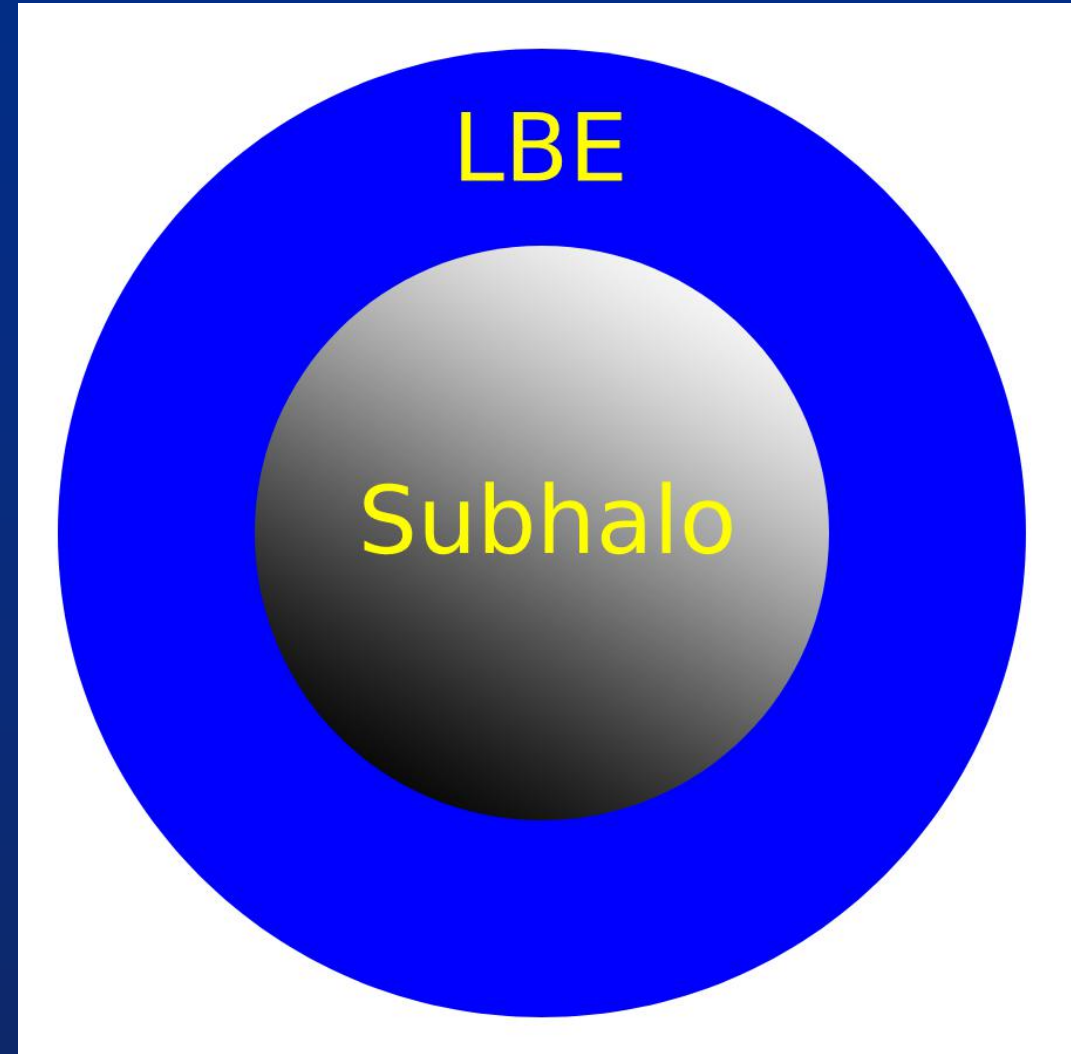


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European Astronomical
Society Annual Meeting
EWASS

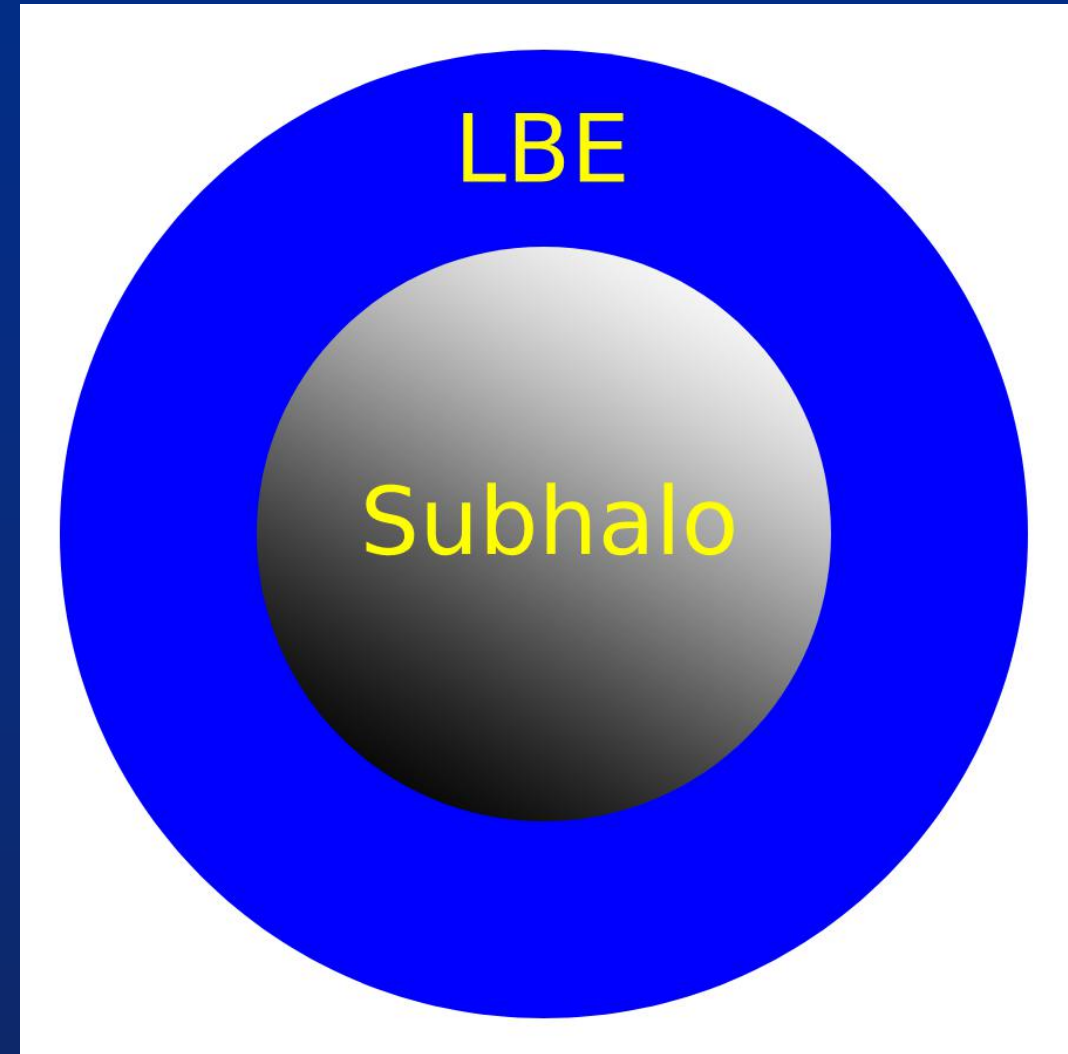


Local Background Environment

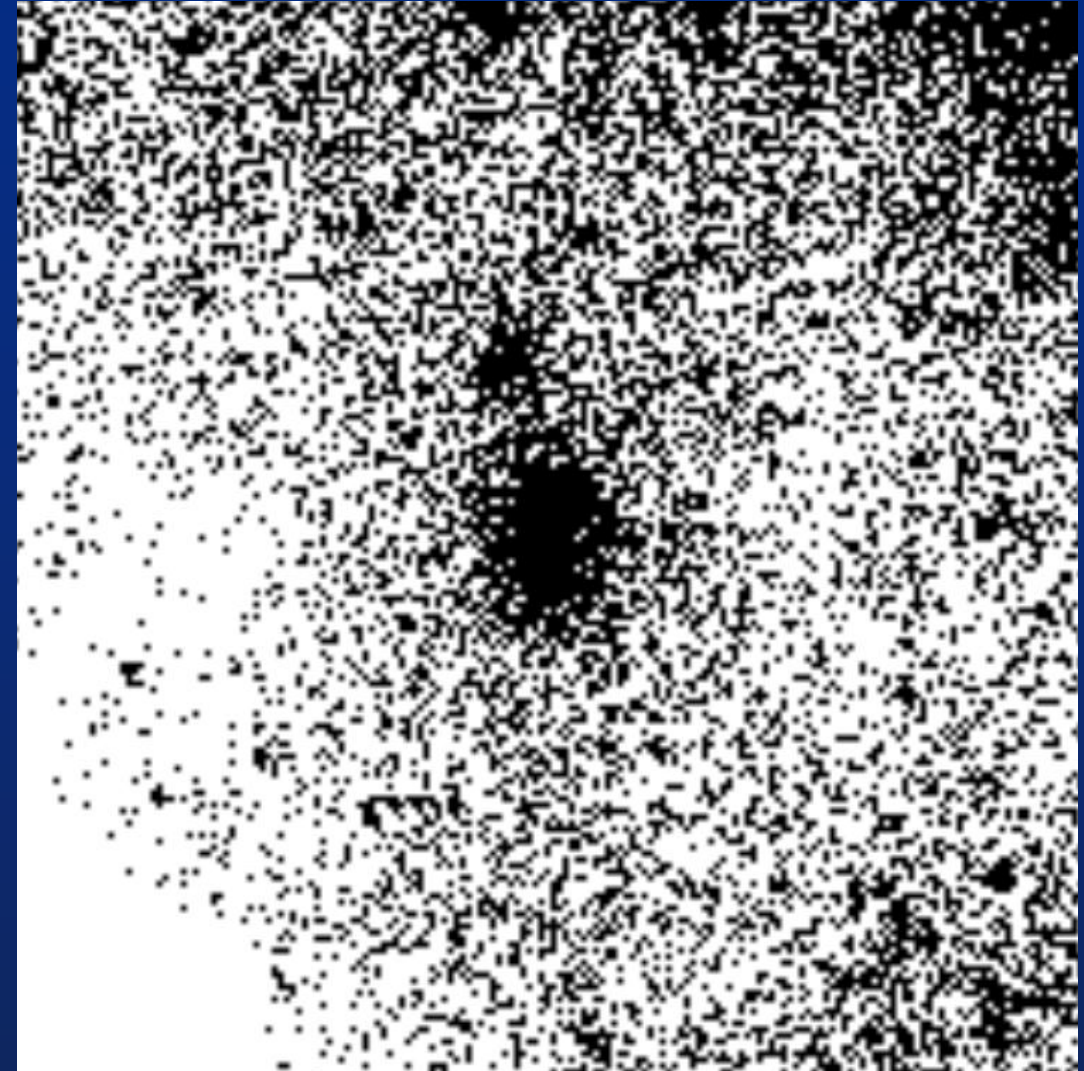


Local Background Environment

- Spherical region around the galaxy or its subhalo
- The galaxy and its subhalo should be completely excluded
- The LBE is quantified by its shape, density and velocity
- Computed directly from the particle data of simulations

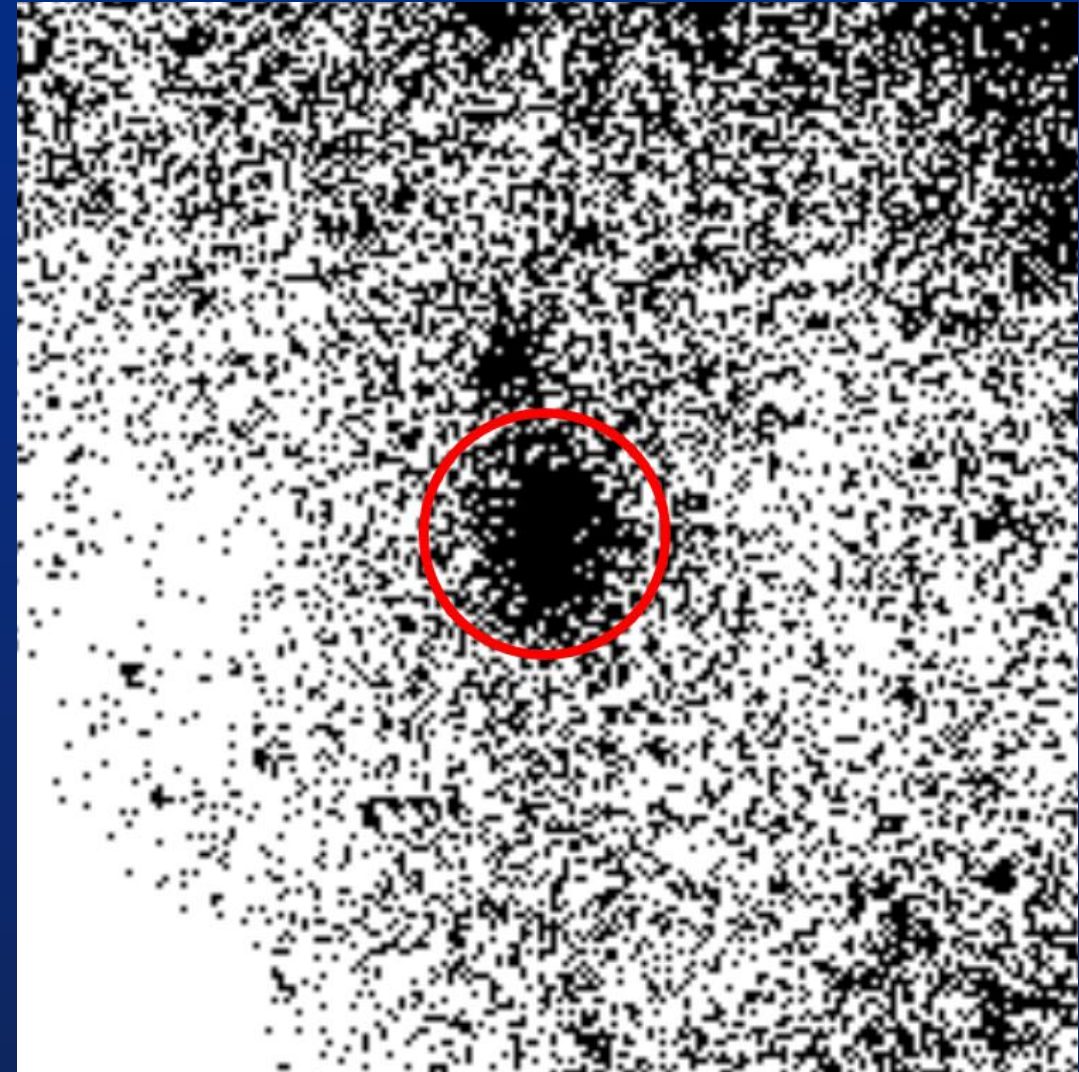


Measuring LBE from the particle data in 3 steps



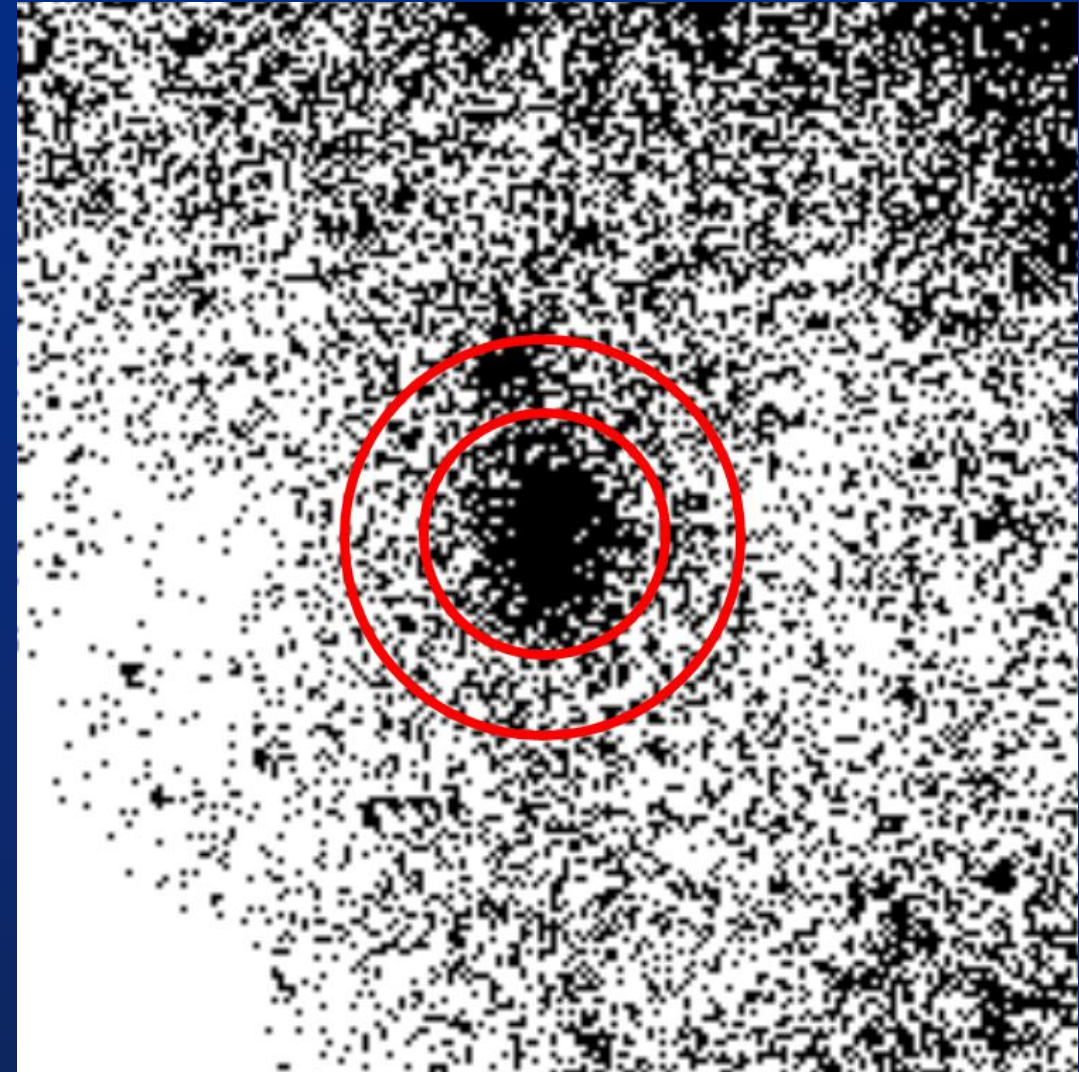
Measuring LBE from the particle data in 3 steps

1. Finding the Subhalo/Galaxy using a subhalo finder algorithm (here we use catalogs based on Subfind)



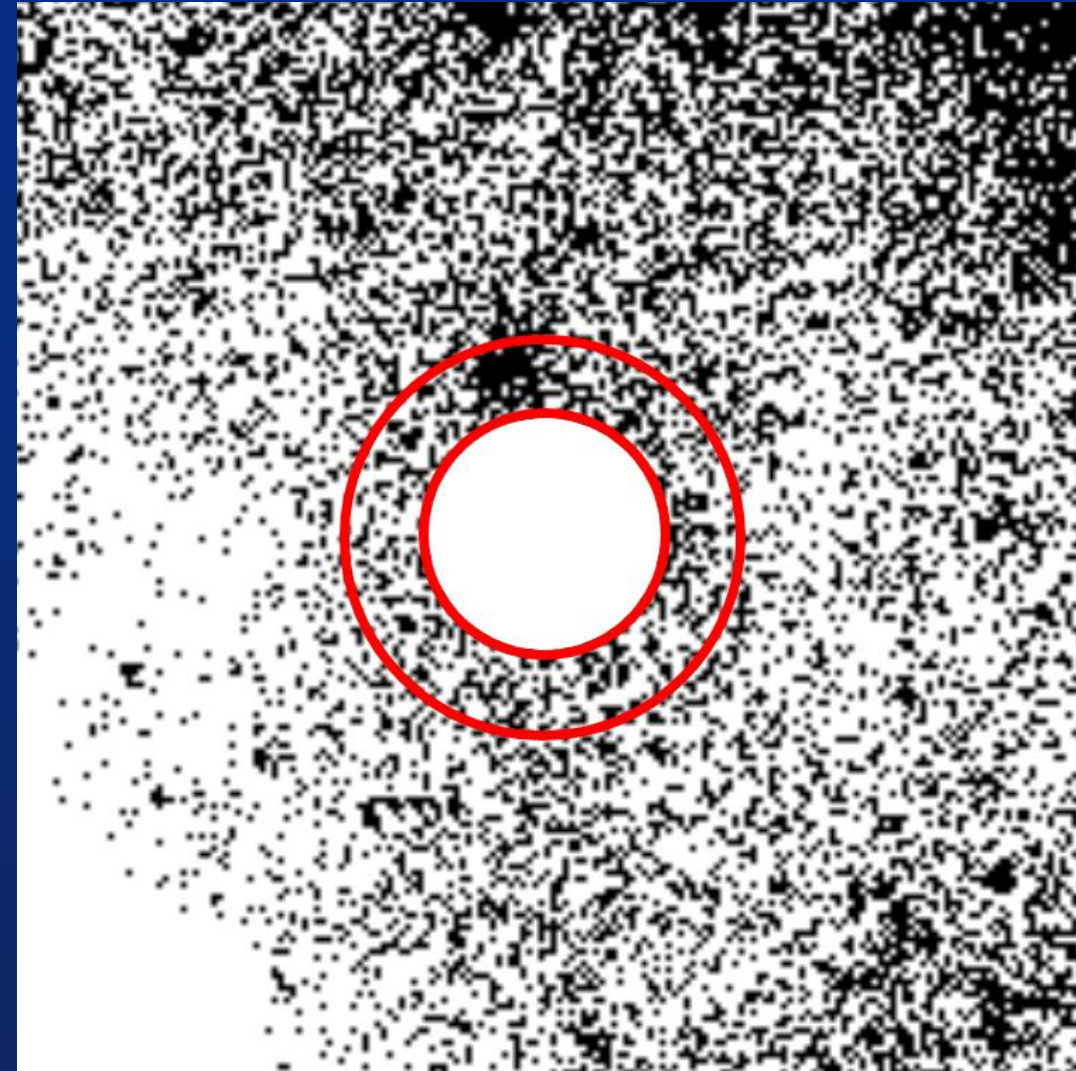
Measuring LBE from the particle data in 3 steps

1. Finding the Subhalo/Galaxy using a subhalo finder algorithm (here we use catalogs based on Subfind)
2. Defining the local environment of the subhalo/galaxy (here we take the outer radius twice the subhalo radius)

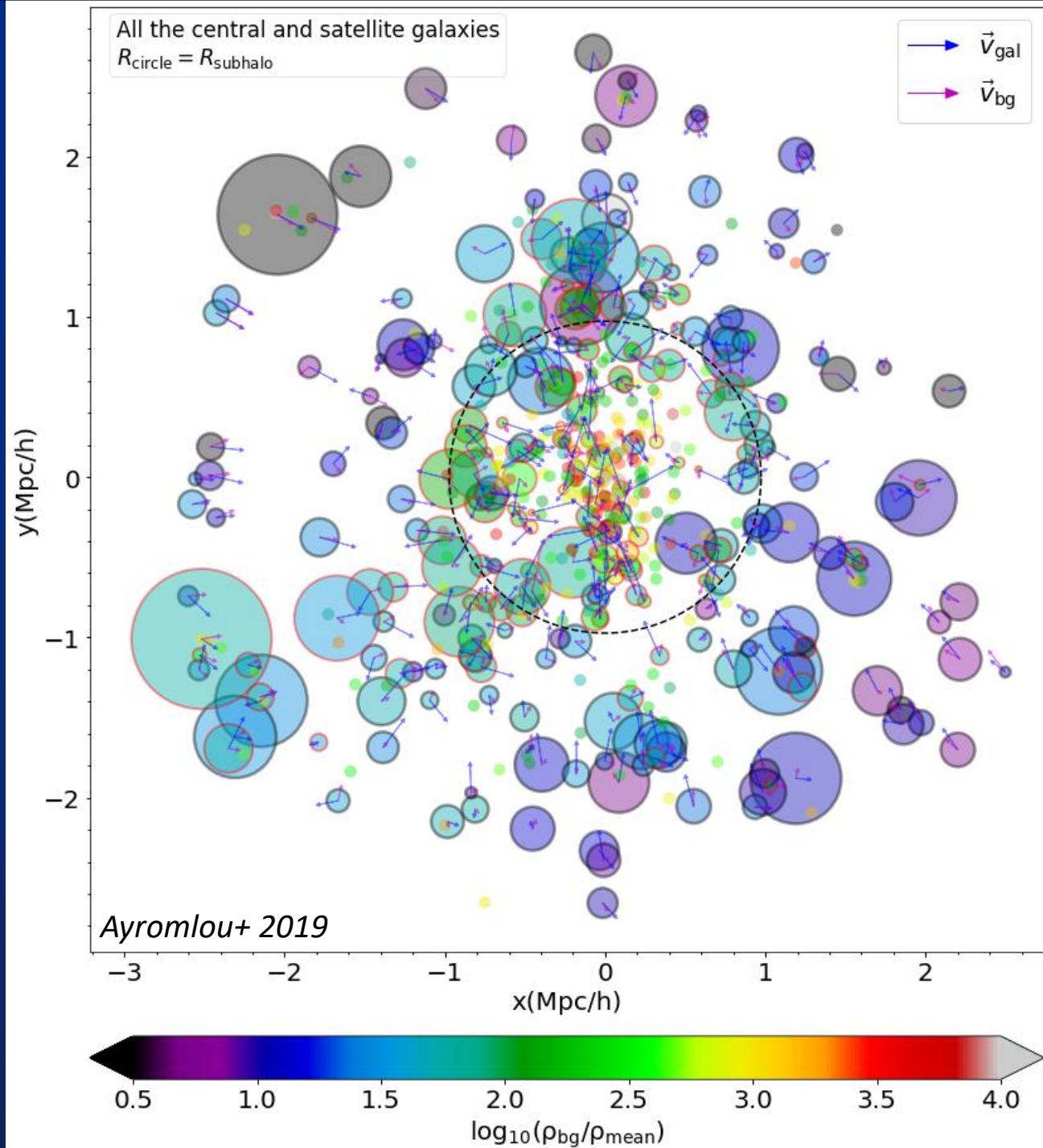
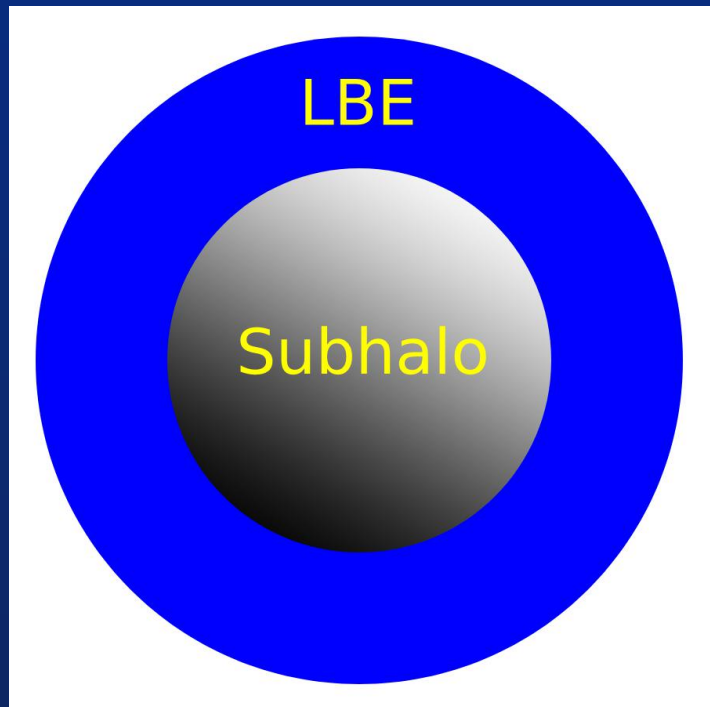


Measuring LBE from the particle data in 3 steps

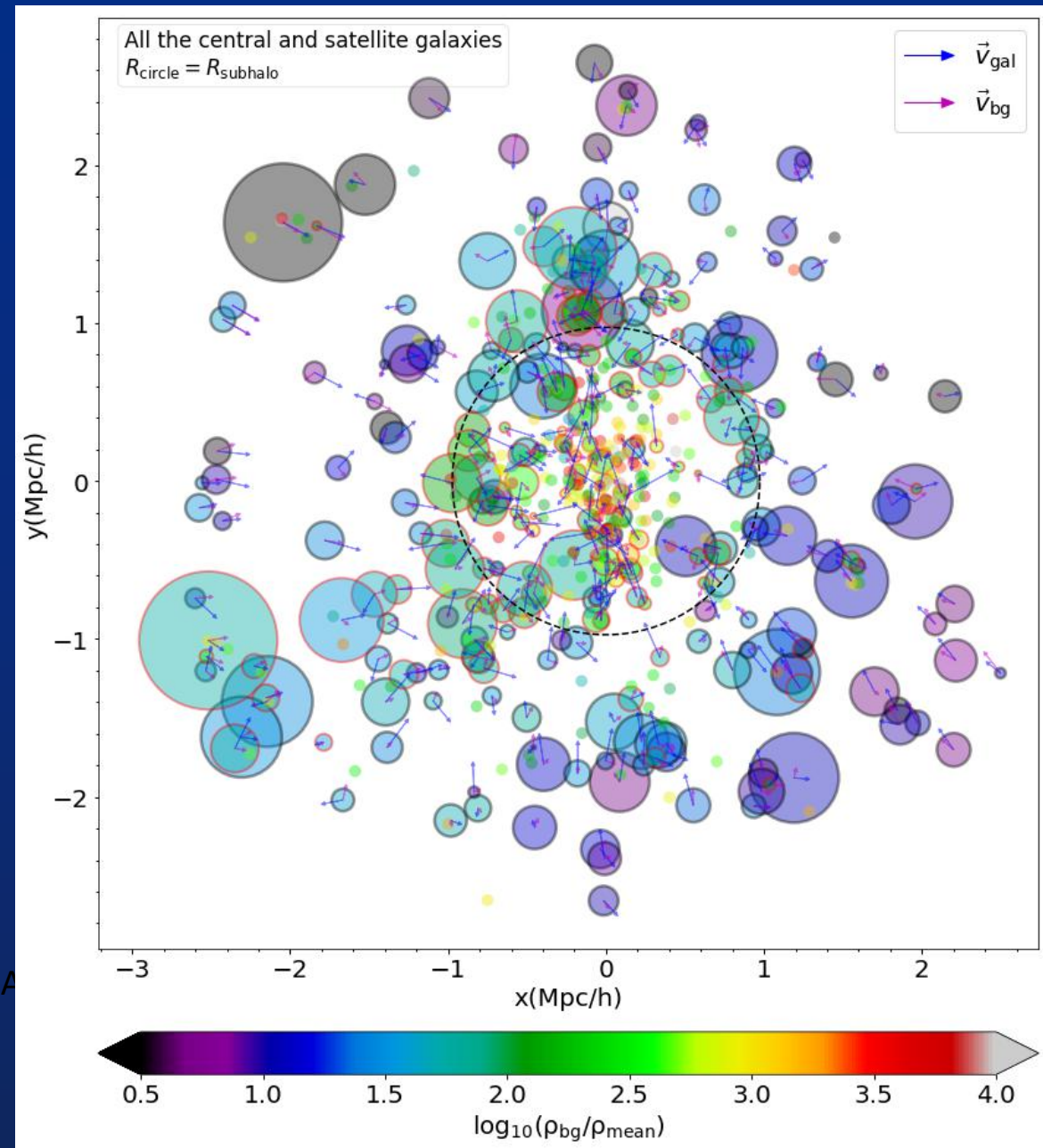
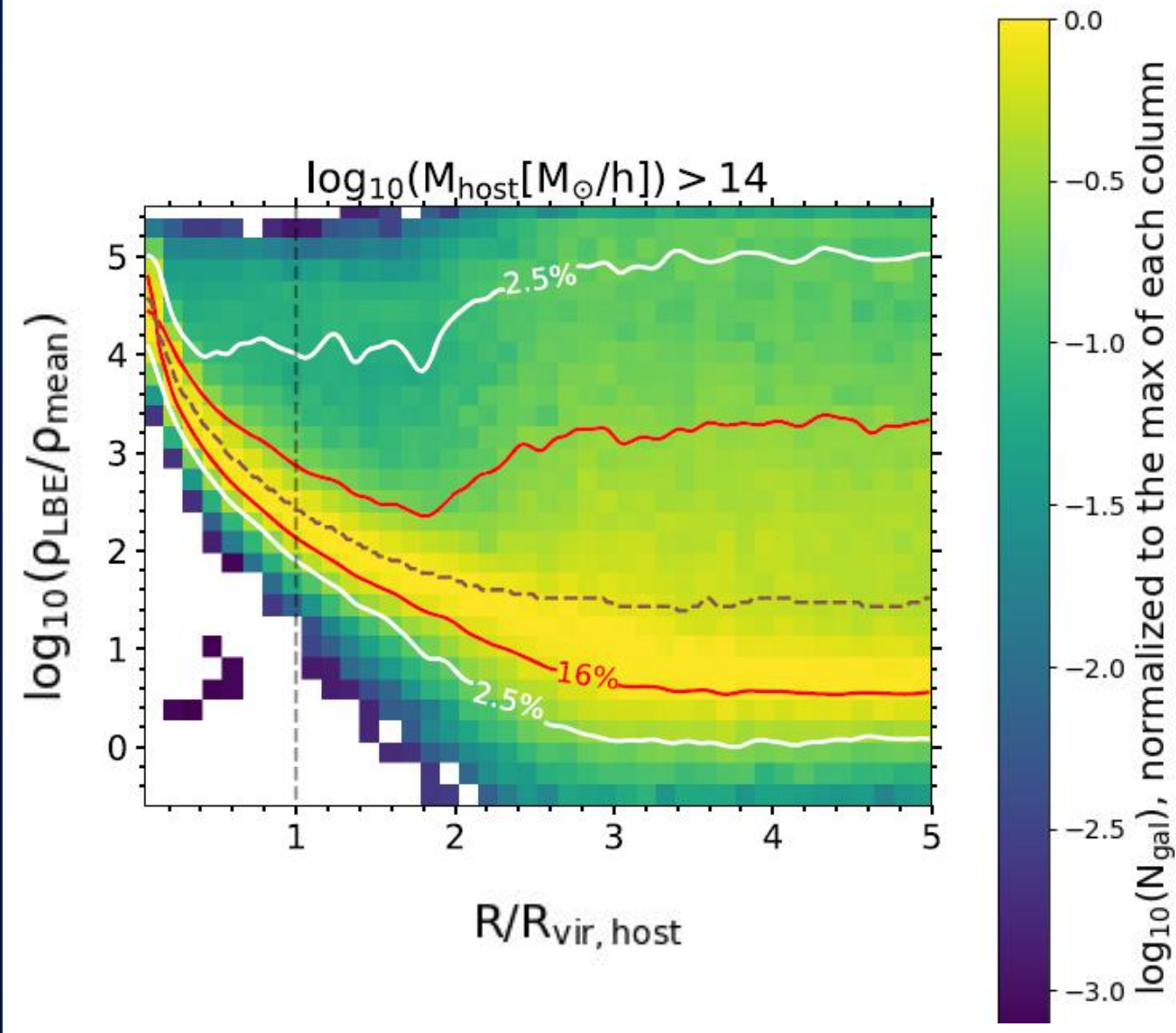
1. Finding the Subhalo/Galaxy using a subhalo finder algorithm (here we use catalogs based on Subfind)
2. Defining the local environment of the subhalo/galaxy (here we take the outer radius twice the subhalo radius)
3. Excluding the galaxy and its subhalo



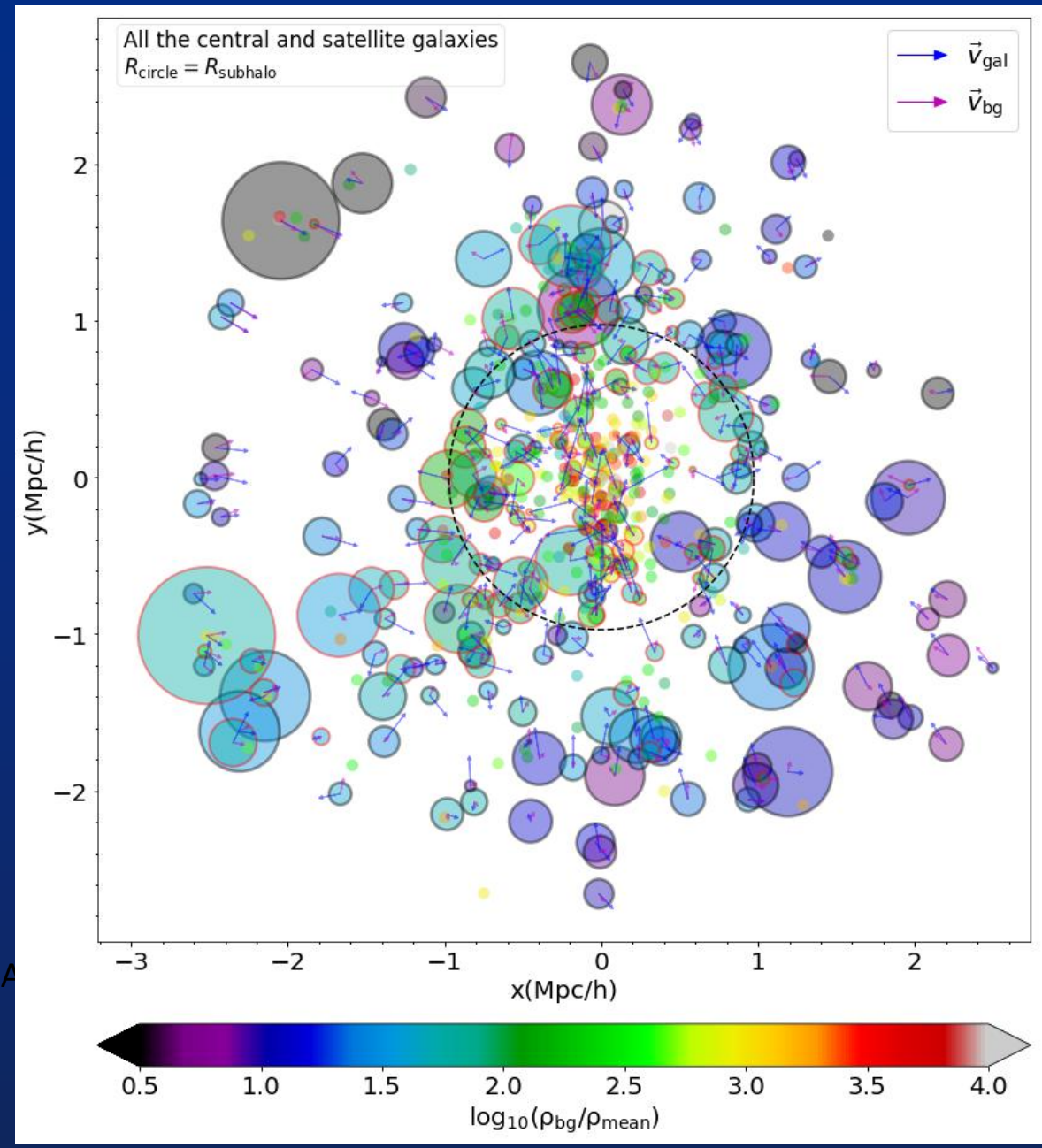
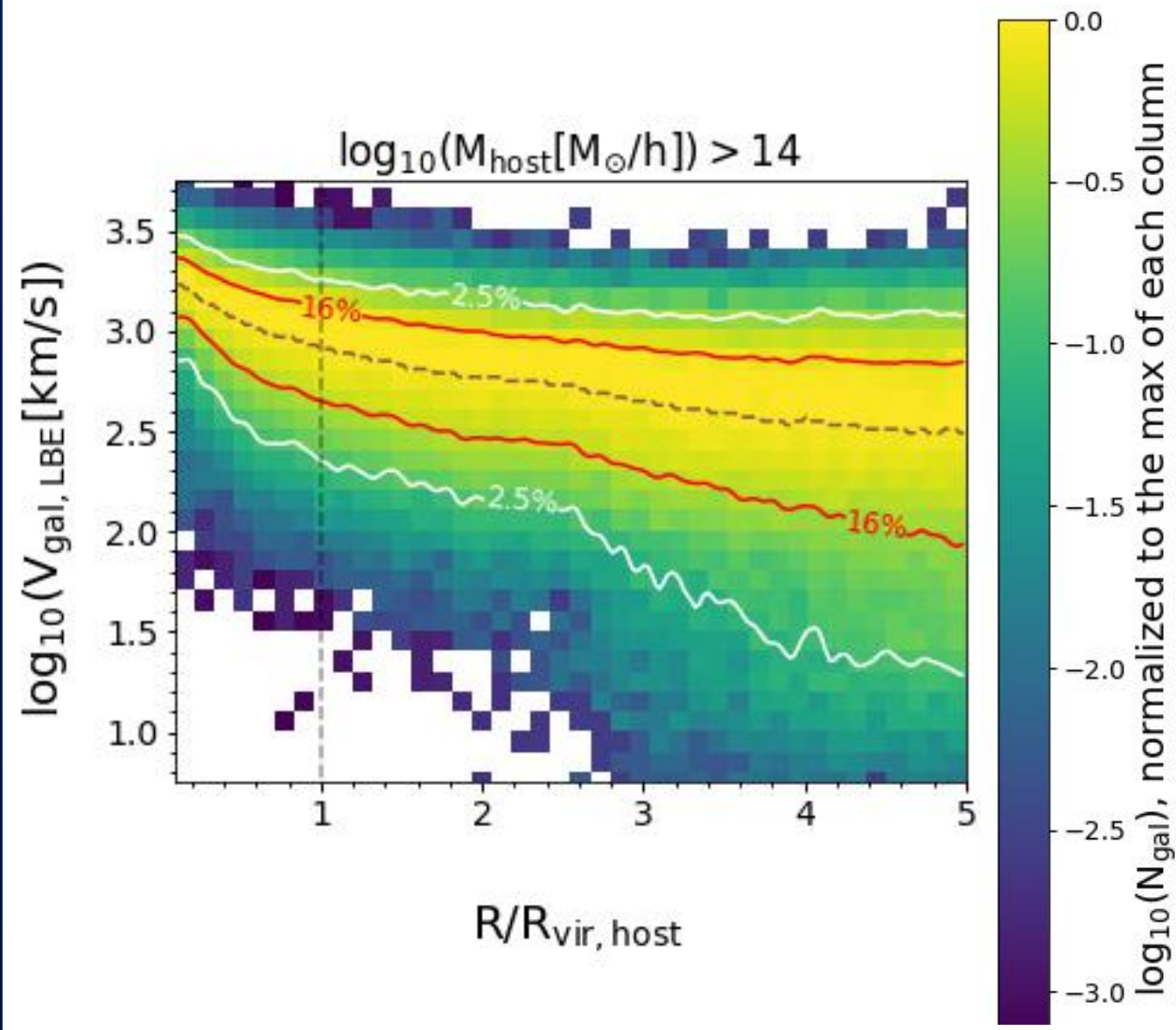
Measuring the LBE: All the galaxies



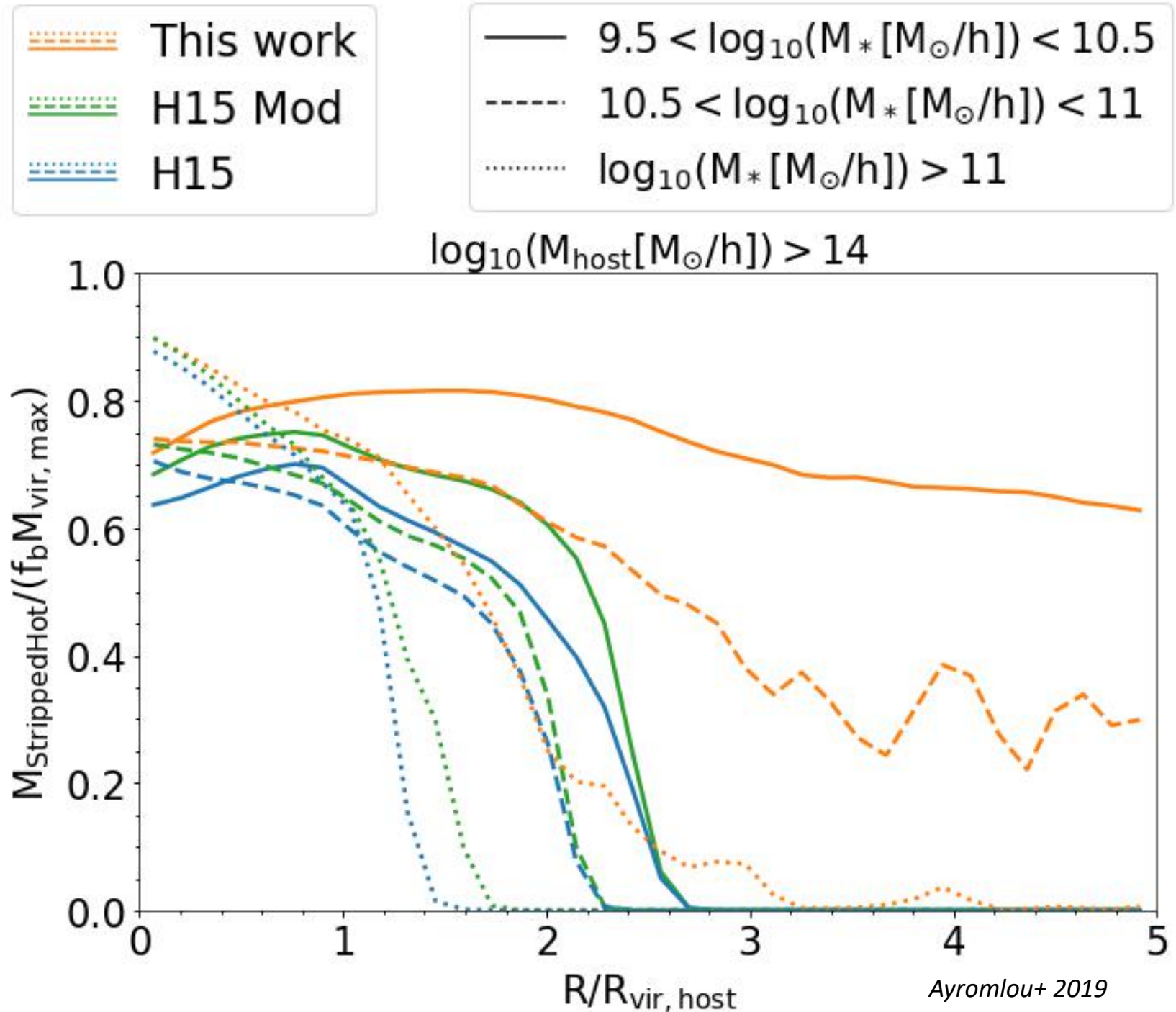
LBE Density



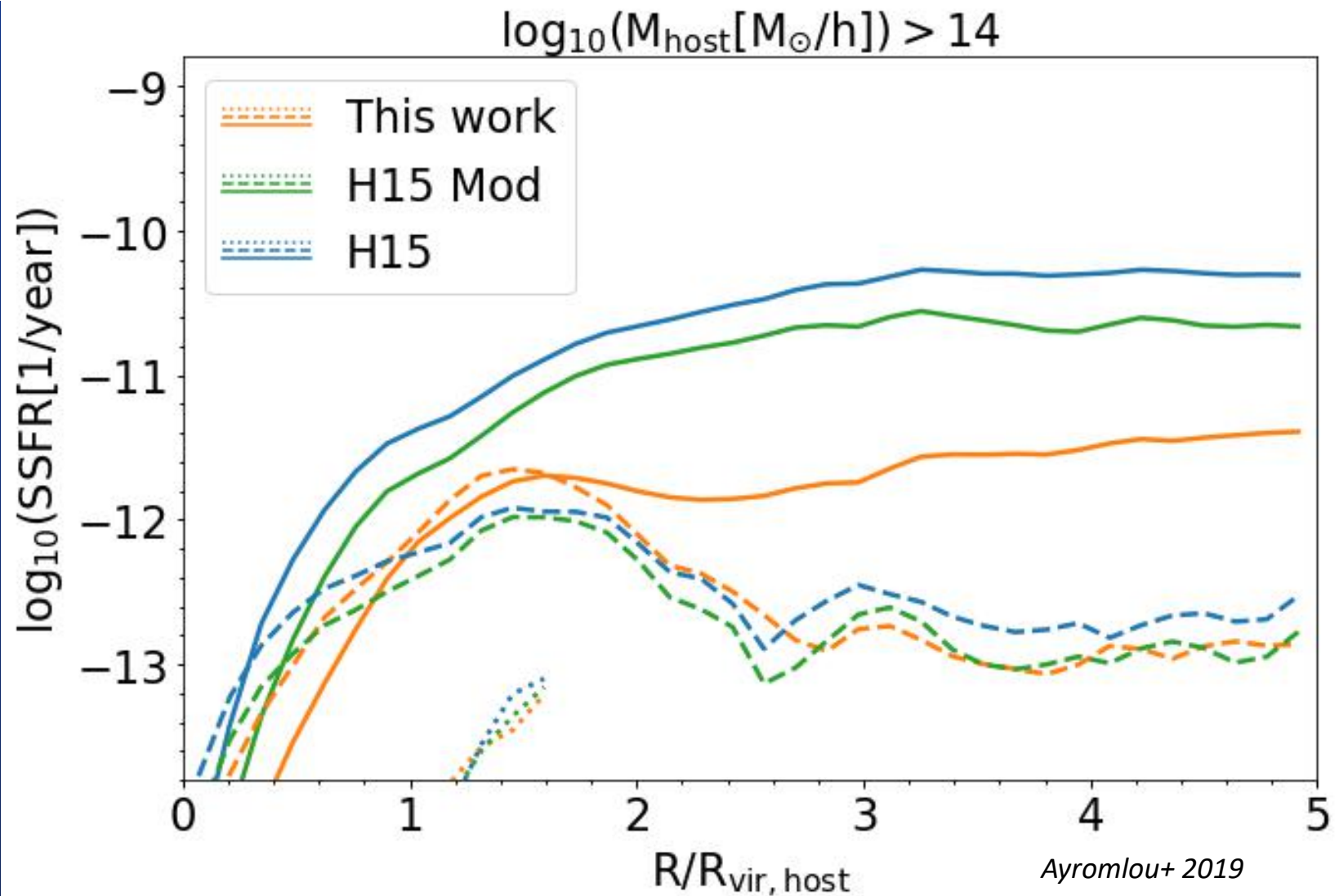
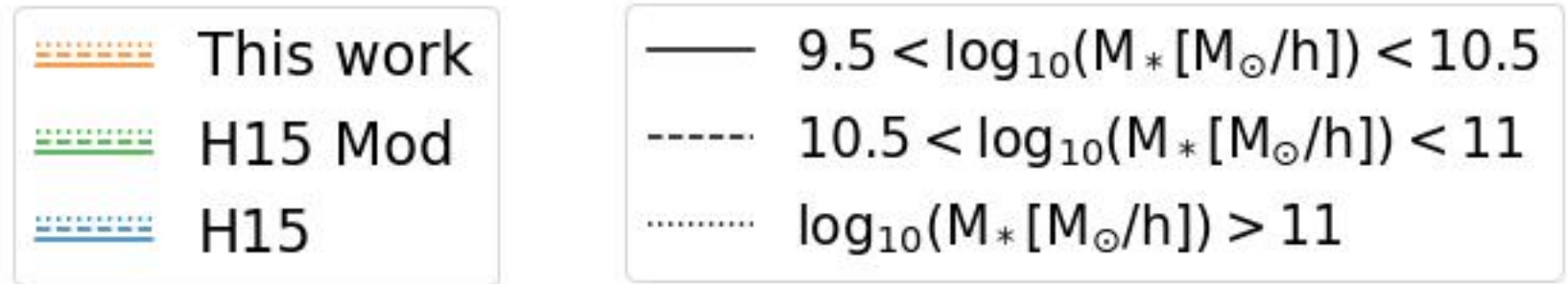
Galaxy's velocity relative to its LBE



Total Stripped Mass through the history of the main progenitor branch



Specific Star Formation Rate



Interested to see more?

Relevant publications:

Ayroumlou et al. 2019, 2020 (MNRAS)

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