

Recap Quizzz -- Chapter 14

- How can gas in a galaxy cool? How does a higher metallicity of the gas impact the cooling ?
- How does gas cooling differ in massive/low-mass halos at high and low redshift?
- Under which conditions can stars form out of gas?

Recap Quizzz -- Chapter 14

- How can we analytically estimate when a gas over density can become gravitationally unstable? What is the Jeans mass and length in this context?
- The Jeans mass of GMCs is $\sim 10 M_{\text{sun}}$, typical masses of GMCs are $10^4 M_{\text{sun}}$, yet GMCs are not forming stars at high rates, why?

Recap Quizzz -- Chapter 14



- What is the problem if we want to model SF in cosmological simulations? And how is it typically done?
- Which problems have simulated galaxies, if we include only cooling and SF in a cosmological simulation?