

1 TNG

Weinberger et al. (2017a), Weinberger et al. (2017b), Pillepich et al. (2017)
Pillepich et al. (2018)

$$\dot{M}_{\text{BH}} = \frac{4\pi\alpha G^2 M_{\text{BH}}^2 \rho}{(c_s^2 + v^2)^{3/2}} \quad (1)$$

$$\dot{M}_{\text{Edd}} = \frac{4\pi\alpha G M_{\text{BH}} m_p}{\epsilon_r \sigma_{\text{T}} c} \quad (2)$$

2 EAGLE

Schaye et al. (2015), Crain et al. (2015)

3 FIRE-2

4 MUFASA

	ILLUSTRIS	TNG
BH Seed Mass	$1 \times 10^5 h^{-1} M_\odot$	$1 \times 10^5 h^{-1} M_\odot$
FoF Halo Mass for BH seeding	$5 \times 10^{10} h^{-1} M_\odot$	$5 \times 10^{10} h^{-1} M_\odot$
BH accretion	$\alpha = 100$ Boosted Bondi-Hoyle	Unboosted Bondi-Hoyle (w/ v_A)
BH accretion	parent gas cell, Eddington limited	nearby cells, Eddington limited
BH positioning	fixed to halo potential minimum	fixed to halo potential minimum

Table 1: What are the similarities and differences between Proto-stellar and AGN accretion disks?

References

- Crain R. A., et al., 2015, MNRAS, 450, 1937
- Pillepich A., et al., 2017, ArXiv e-prints
- Pillepich A., et al., 2018, MNRAS, 473, 4077
- Schaye J., et al., 2015, MNRAS, 446, 521
- Weinberger R., et al., 2017a, MNRAS, 465, 3291
- Weinberger R., et al., 2017b, ArXiv:1710.04659v1