

1 Bondi Hoyle

Bondi & Hoyle (1944); The rate of accretion can be give as::

$$\dot{M} = \frac{4\pi G^2 M^2 \rho_\infty}{v^3} \quad (1)$$

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

	Proto-stellar disks	AGN disks
h/r	~ 0.1	
Adiabatic/isothermal?	Mainly adiabatic	
B -field strength	Interesting issue. Thought to be sensitive to MRI at later stages at least. However, there are some arguing that global magnetic fields may play a key in transporting angular momentum away.	
Mechanism(s) for turbulence generation	Self-gravity at early times, MRI later	
Dust chemistry	Certainly many people working on chemistry in these discs	
Dust opacity	Regarded as important for cooling	
Iron present?	Yes, and regarded as having, initially at least, an ISM composition.	

2 This, THIS, THIS!!!!

http://www.scholarpedia.org/article/Accretion_discs

References

Bondi H., Hoyle F., 1944, MNRAS, 104, 273