

What do we know?

- $M-\sigma$ ($-M$, $-L$, ...)
- Outflows exist (molecular, atomic, ...)
- AGN: gas on galaxy scales necessary (but not sufficient)
- low vs high luminosity trends
 - Quenching timescales
 - Low-L: mostly disks ($z=0, 1, 2$)
 - High-L: mostly spheroids ($z=0$)
 - Environmental effects
 - Mergers (?)
- Demographics: missing rare objects \rightarrow large IR+X
- Most AGN: $L/L_{\text{edd}} \ll 1$

What do we still not know?

- What drives outflows? Mass flux, velocities?
- AGN: specific trigger needed? → major, minor merger?
- AGN feedback modes:
 - Can AGN quench SF? Do they?
 - Can AGN keep galaxies red and dead?
 - Radiation, outflow, or what?
 - Demographics?
 - Uniqueness of models? (mass functions, etc.)
- SF vs. AGN: 60 μ ? H, He, fine structure lines,...
- Importance: AGN vs. stars for galevo, reionization