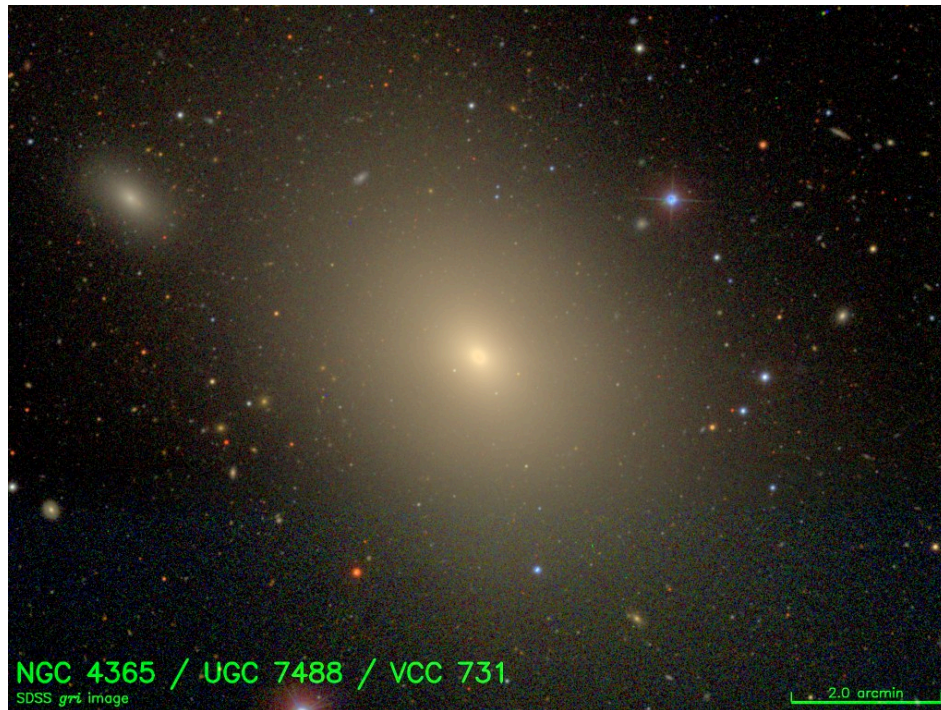
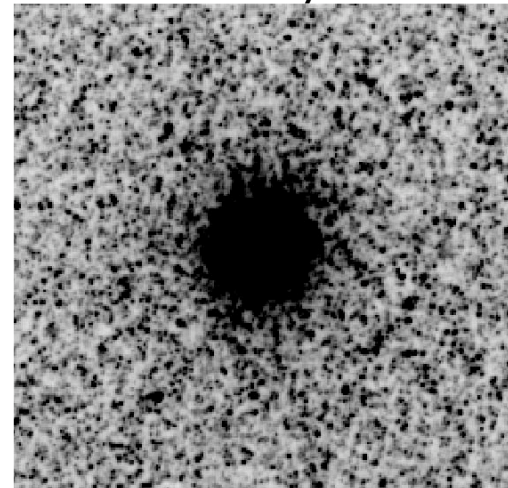


Blue Tilts + M/L

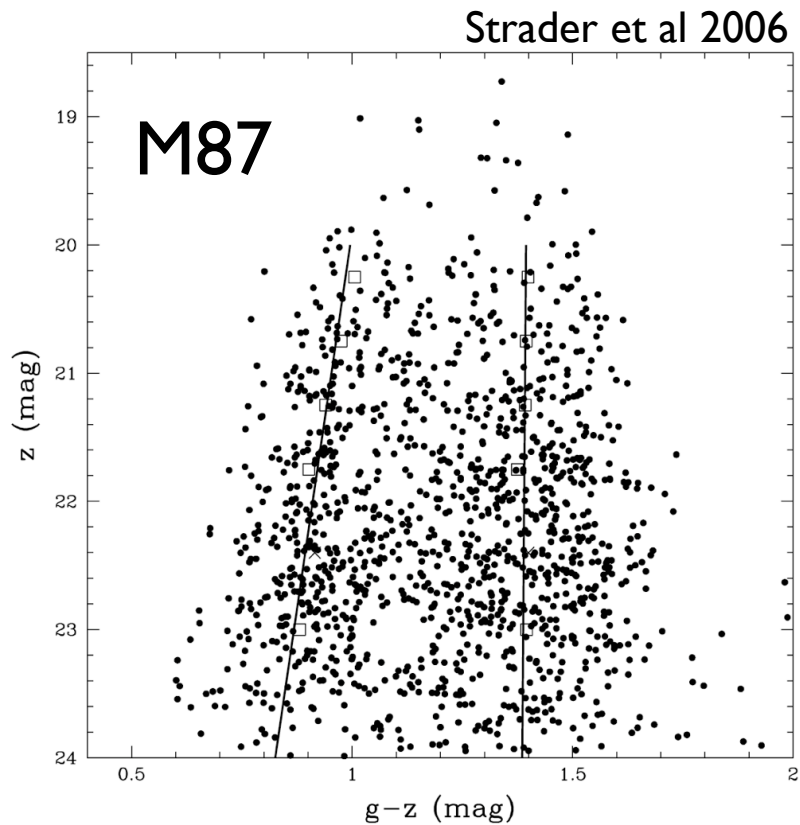
Jay Strader



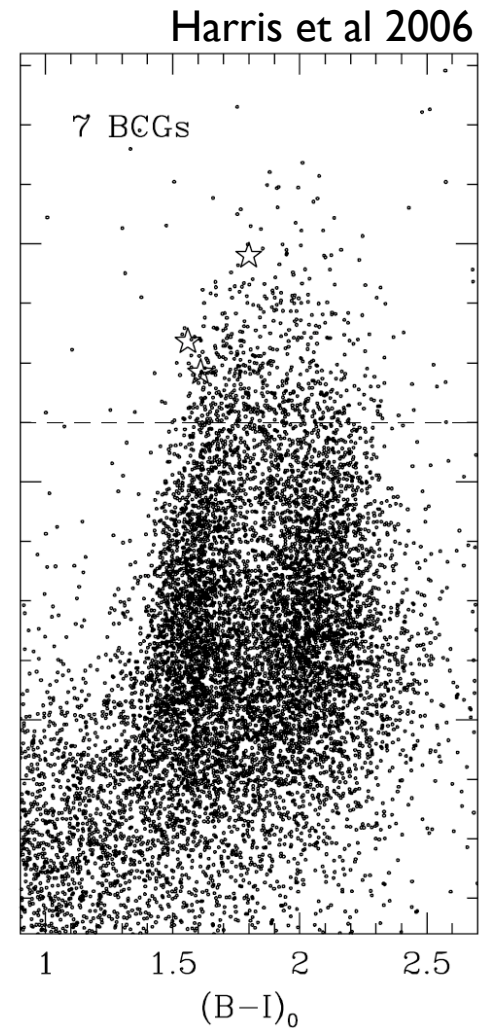
Barmby et al 2007



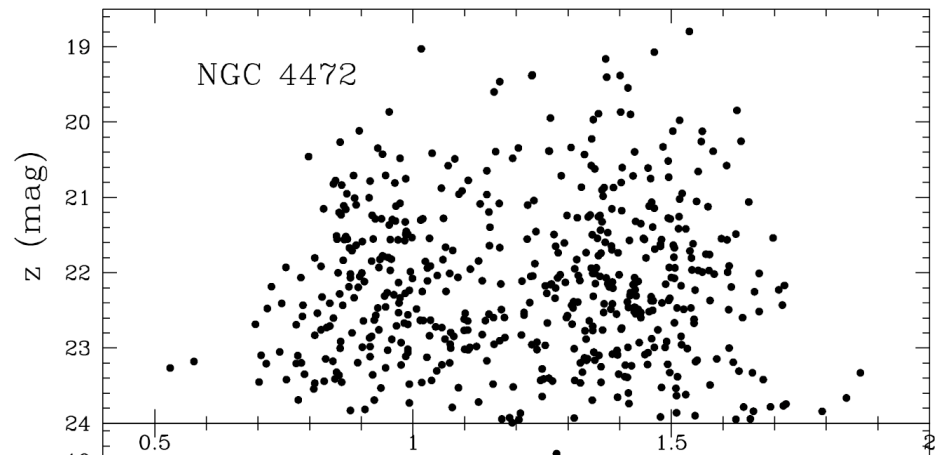
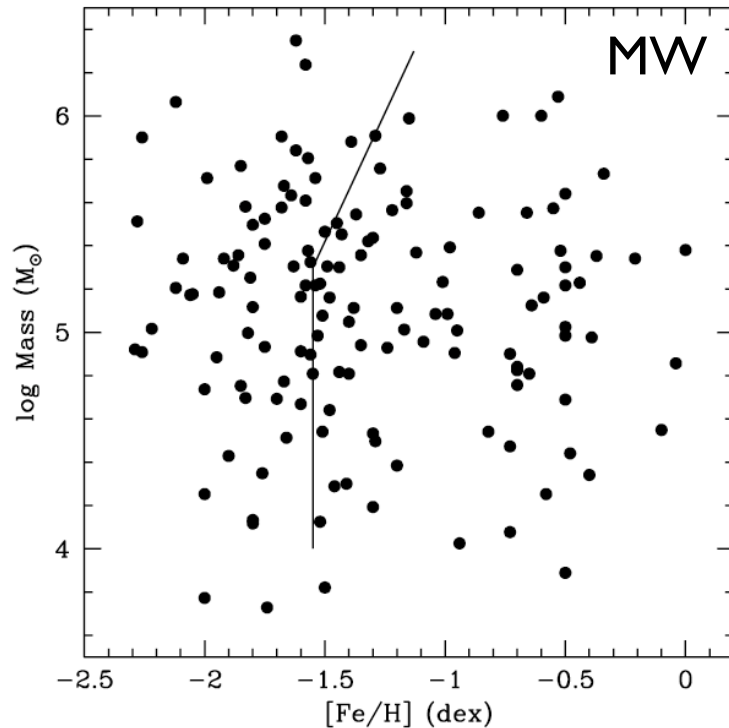
Blue Tilt



HST/ACS + wide baseline

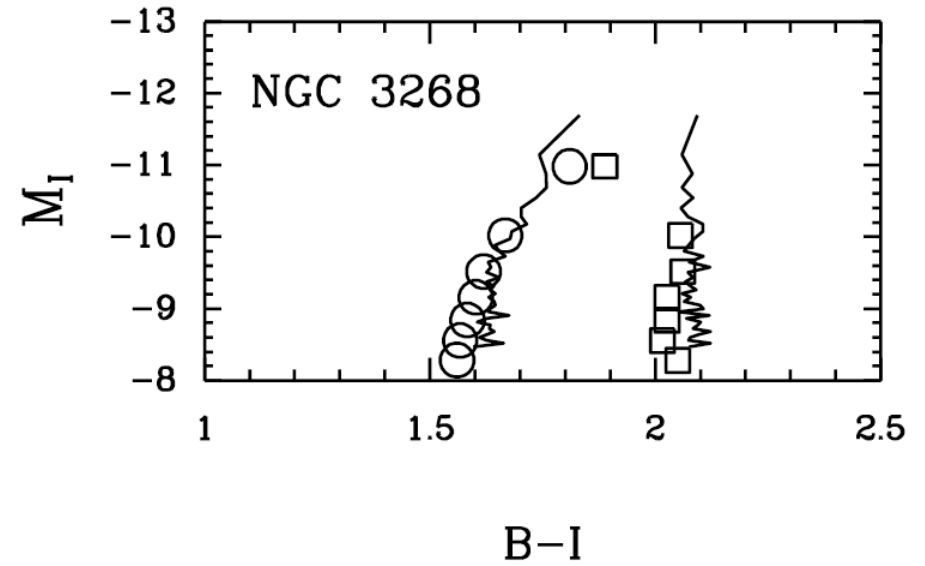
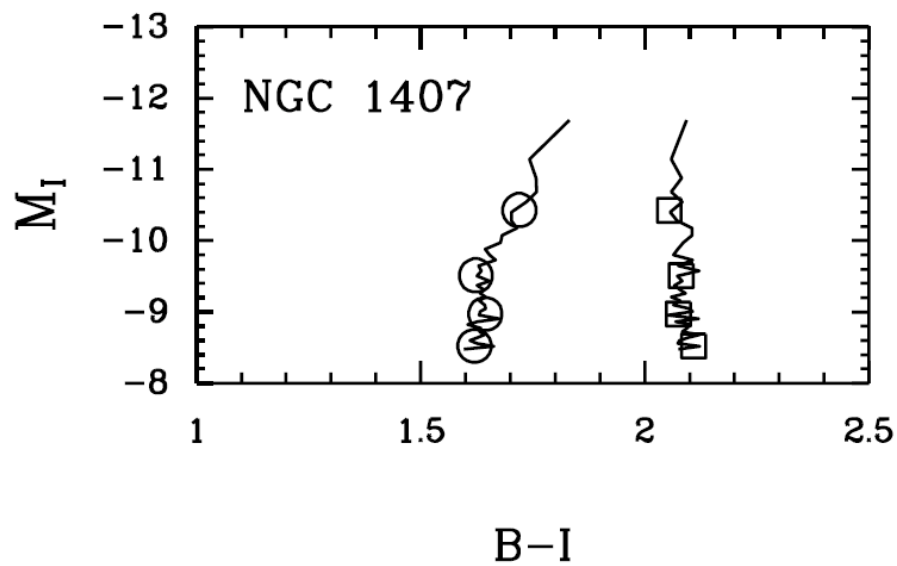


Blue Tilt Factoids



Not present in all galaxies.
(this is an issue for any explanation!)

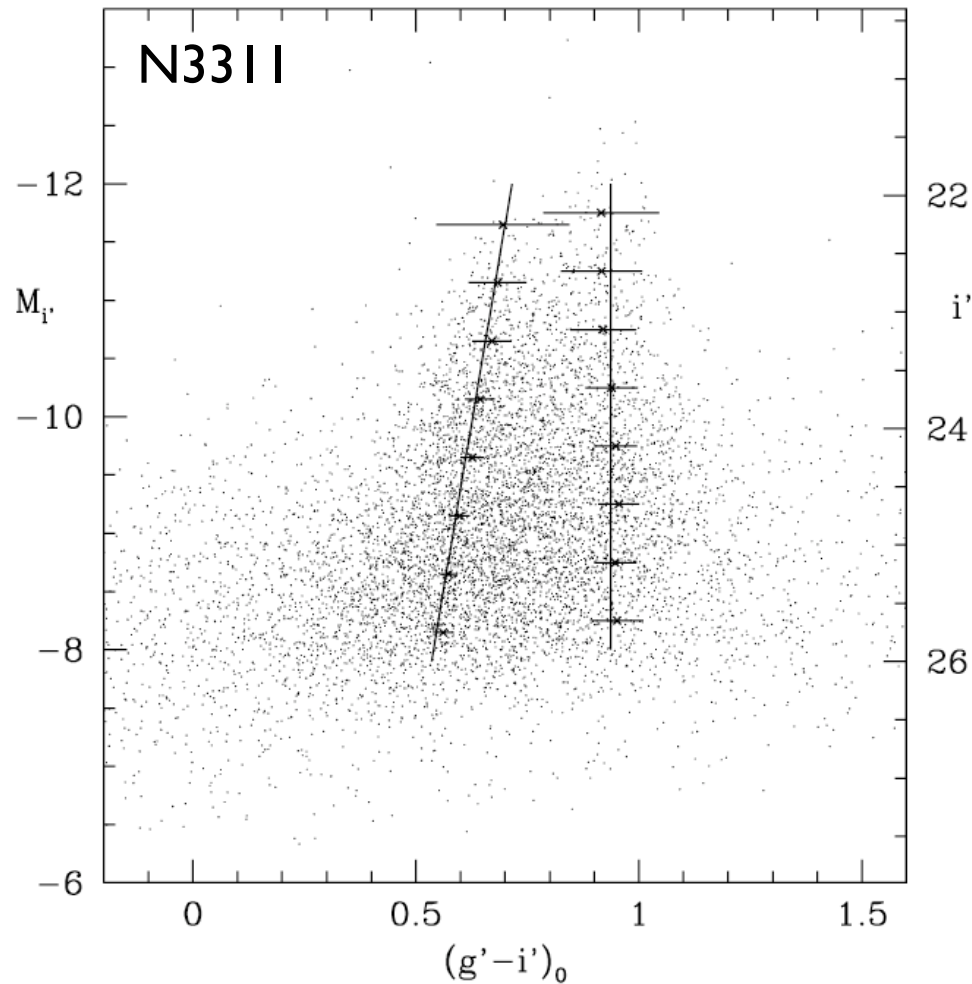
Blue Tilt Factoids



Shape varies among galaxies.

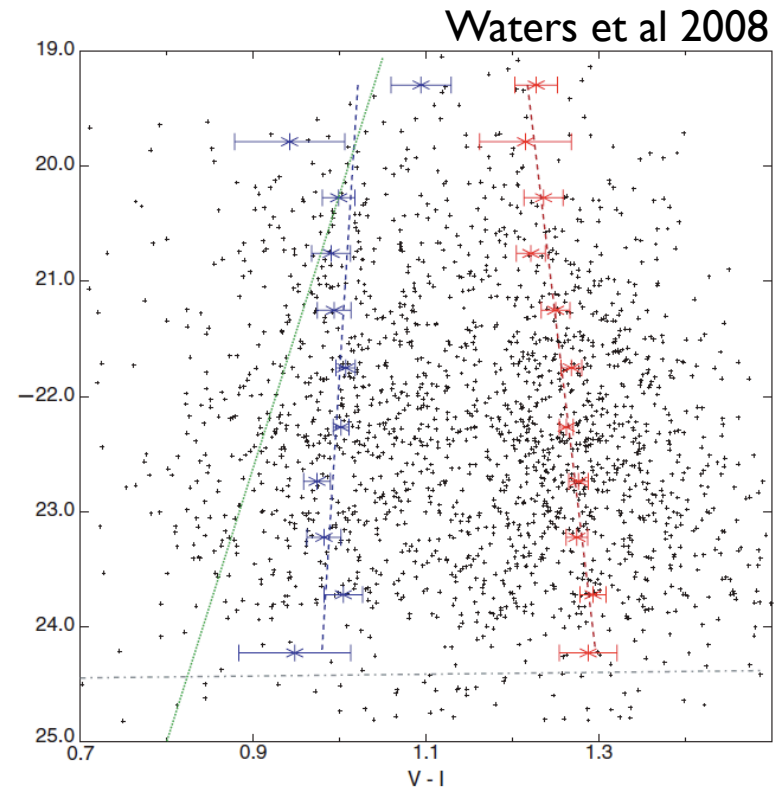
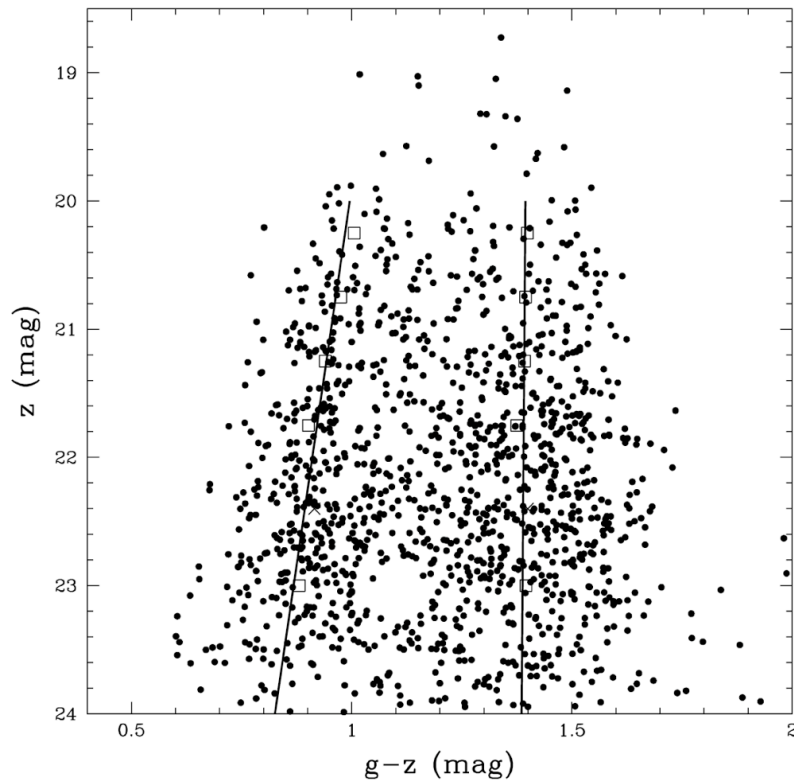
Blue Tilt Factoids

Wehner et al 2008



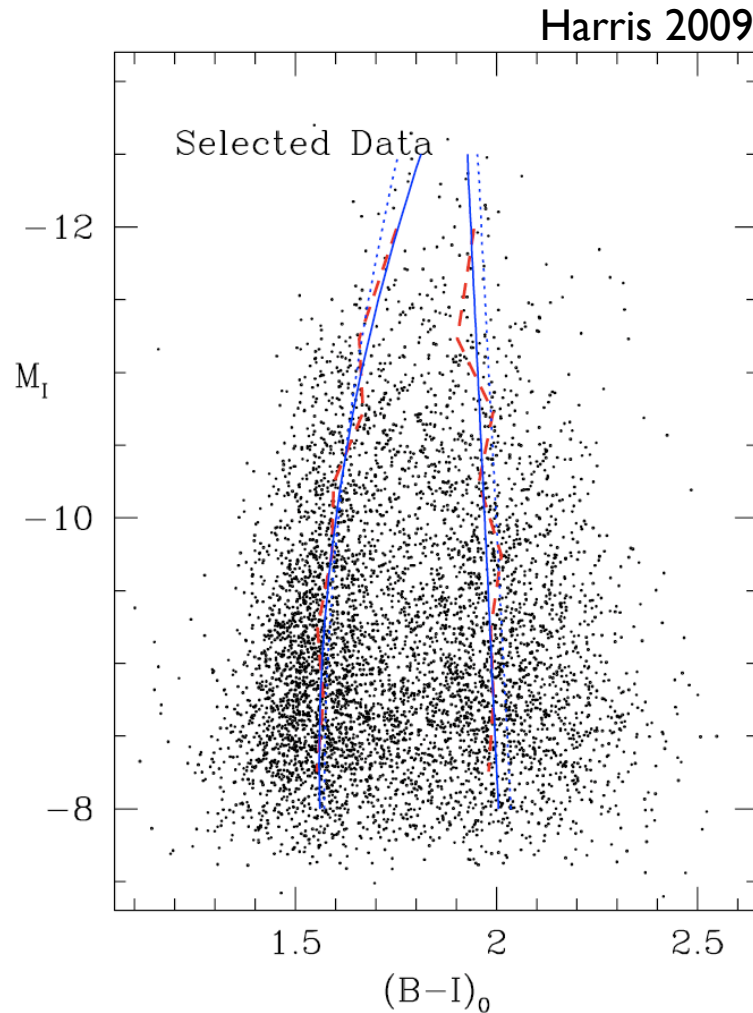
Visible from the
ground.

Blue Tilt Factoids



Galaxies aren't even sure that they have it.

Blue Tilt



Converted into
metallicity, the tilt
corresponds to:

$$Z \sim M^{0.4-0.5}$$

(keeping in mind one PL
may not make sense)

Self-Enrichment

Basic idea: balance SNe feedback with binding energy

(1) SF efficiency varies with cluster mass
(SS08, after AZ01)

Self-Enrichment

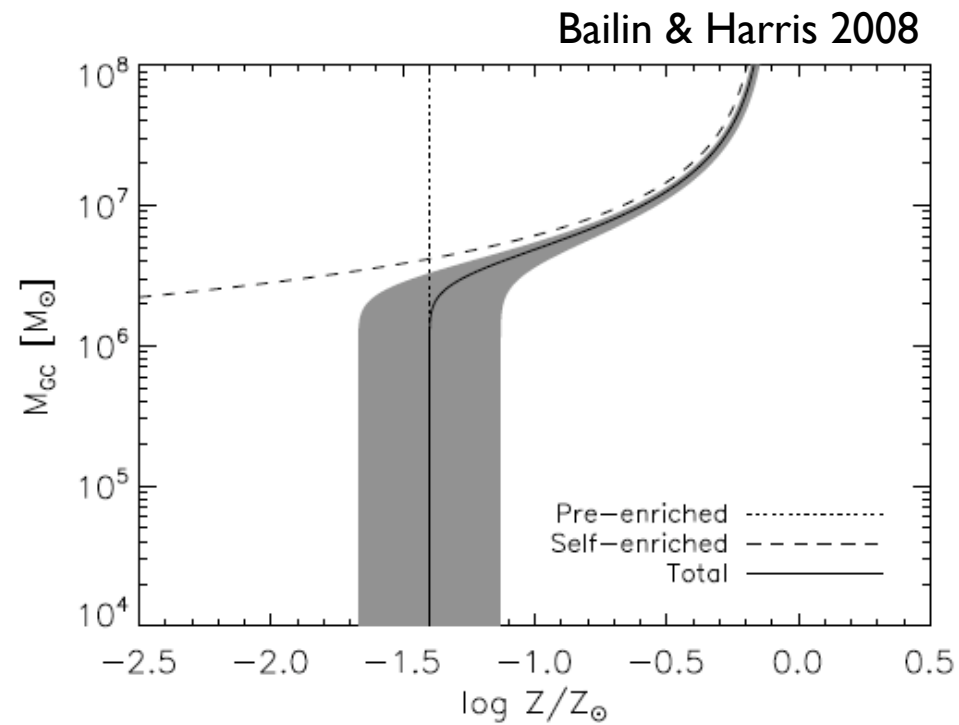
Basic idea: balance SNe feedback with binding energy

(I) SF efficiency varies with cluster mass

(II) Metal (=gas) retention varies with cluster mass (Bailin & Harris 2008)

(III) Both

Self-Enrichment



Predictions

- (a) You should eventually see a “red tilt”.
- (b) Blue tilt GCs should have metallicity spreads.

+

Is there a connection to enrichment of Galactic GCs?

M/L of M31 GCs

