Galaxy And Mass Assembly

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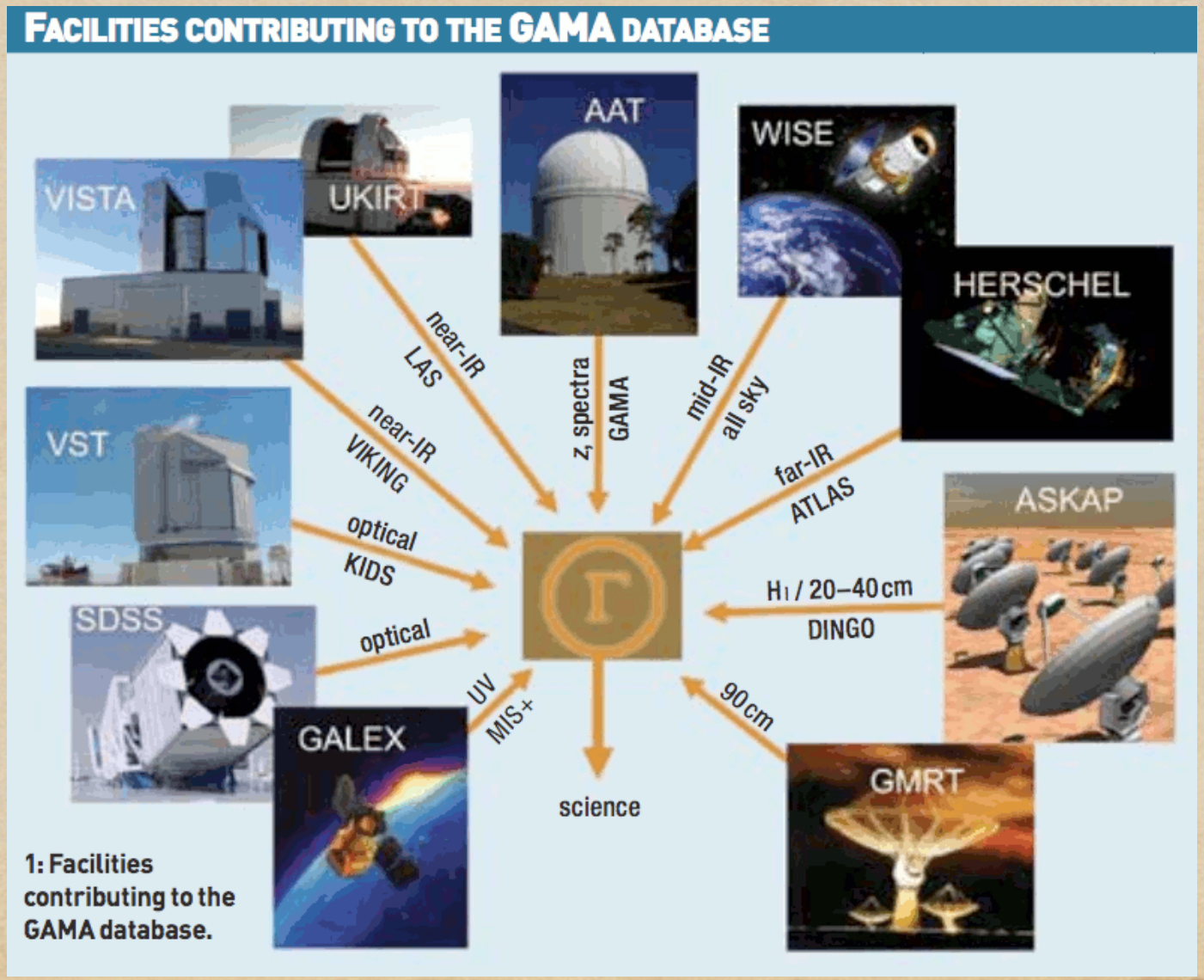
Anglo-Australian Observatory

GAMA



Driver et al 2009, A&G, 50, 5.12

GAMA team

Galaxy And Mass Assembly (GAMA)

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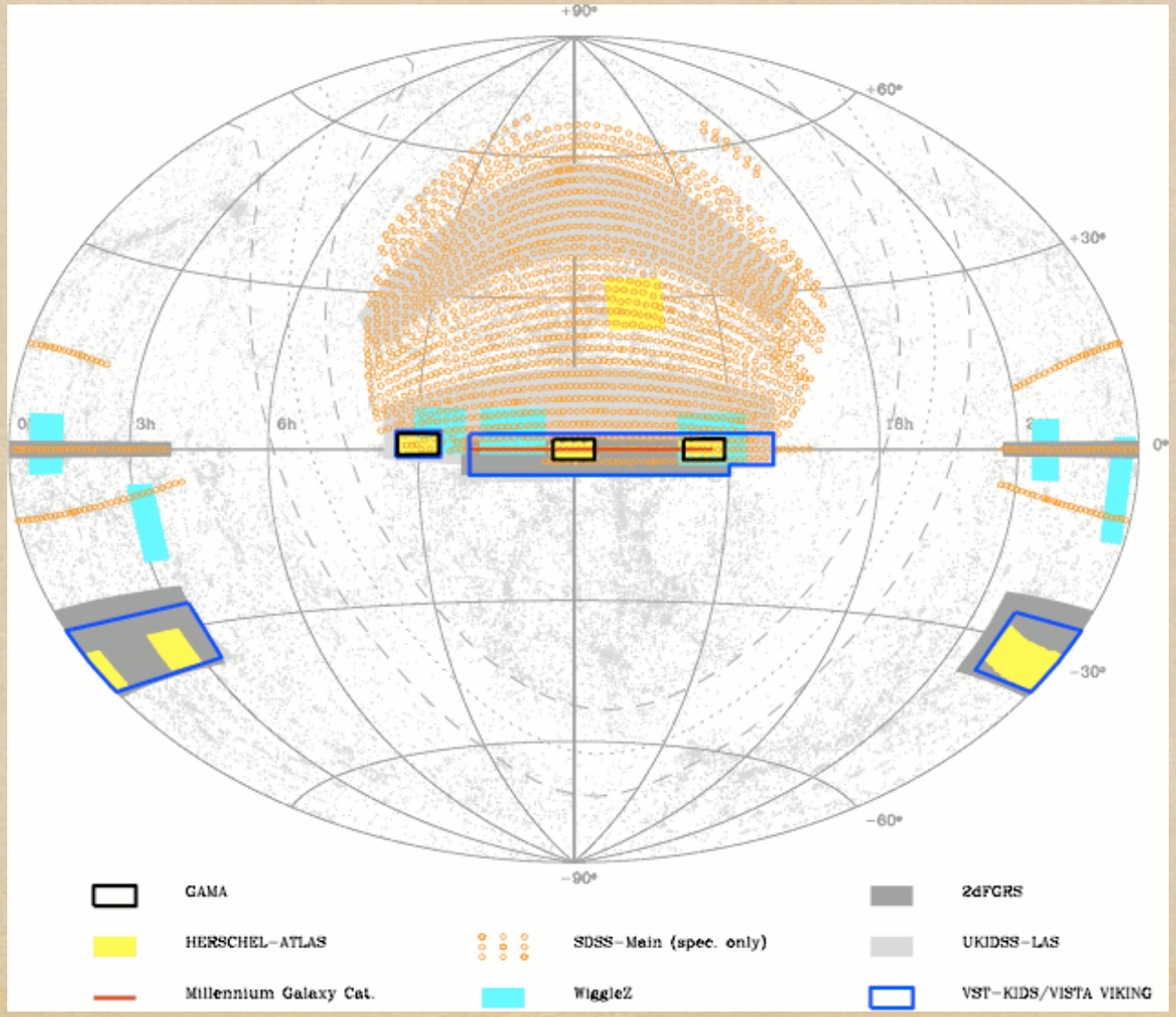
in collaboration with

ASKAP DINGO, HERSCHEL ATLAS, VISTA VIKING, VST KIDS, GALEX and the Durham ICC

GAMA Key Science

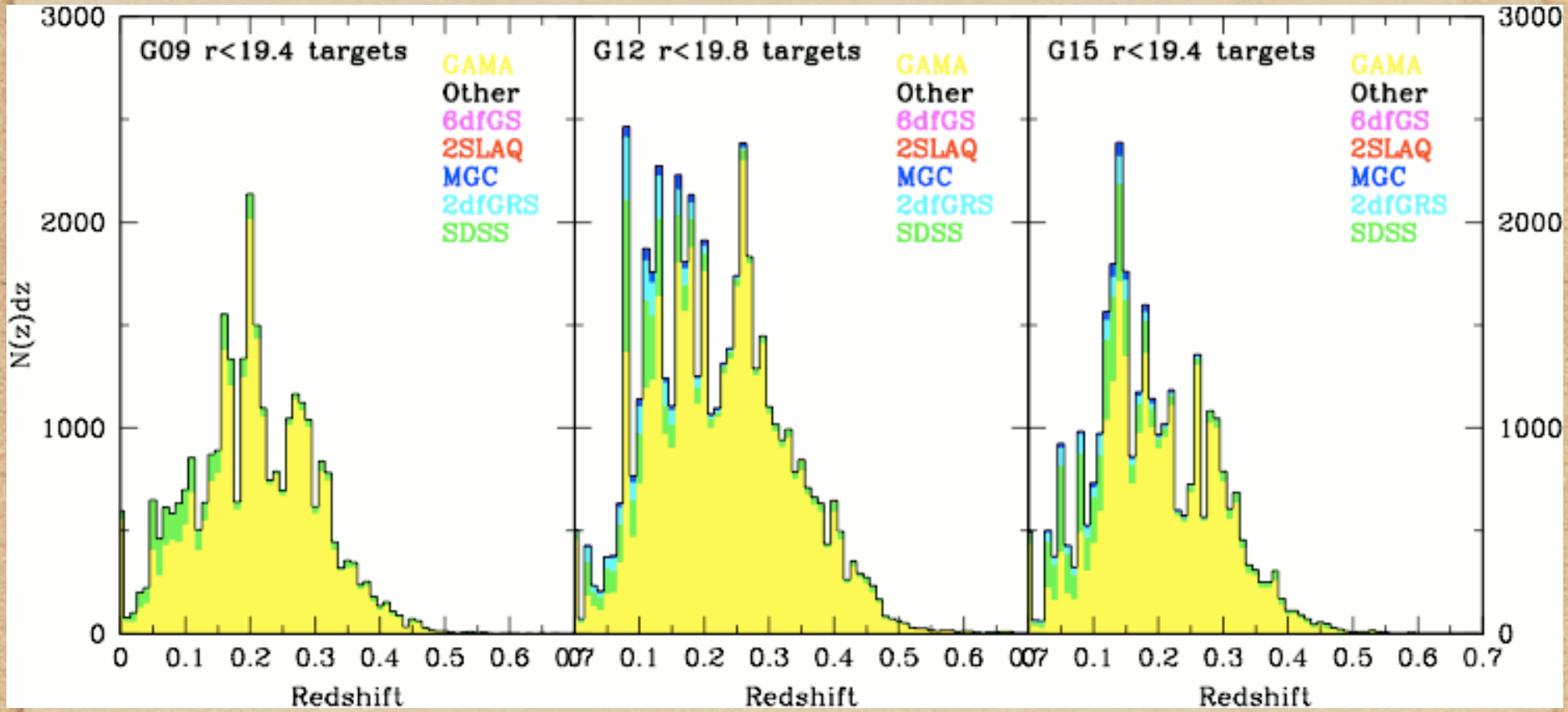
- A measurement of the dark matter halo mass function of groups and clusters using group velocity dispersion measurements.
- A comprehensive determination of the galaxy stellar mass function to Magellanic Cloud masses to constrain baryonic feedback processes.
- A direct measurement of the recent galaxy merger rates as a function of mass, mass ratio, local environment and galaxy type.

GAMA survey area



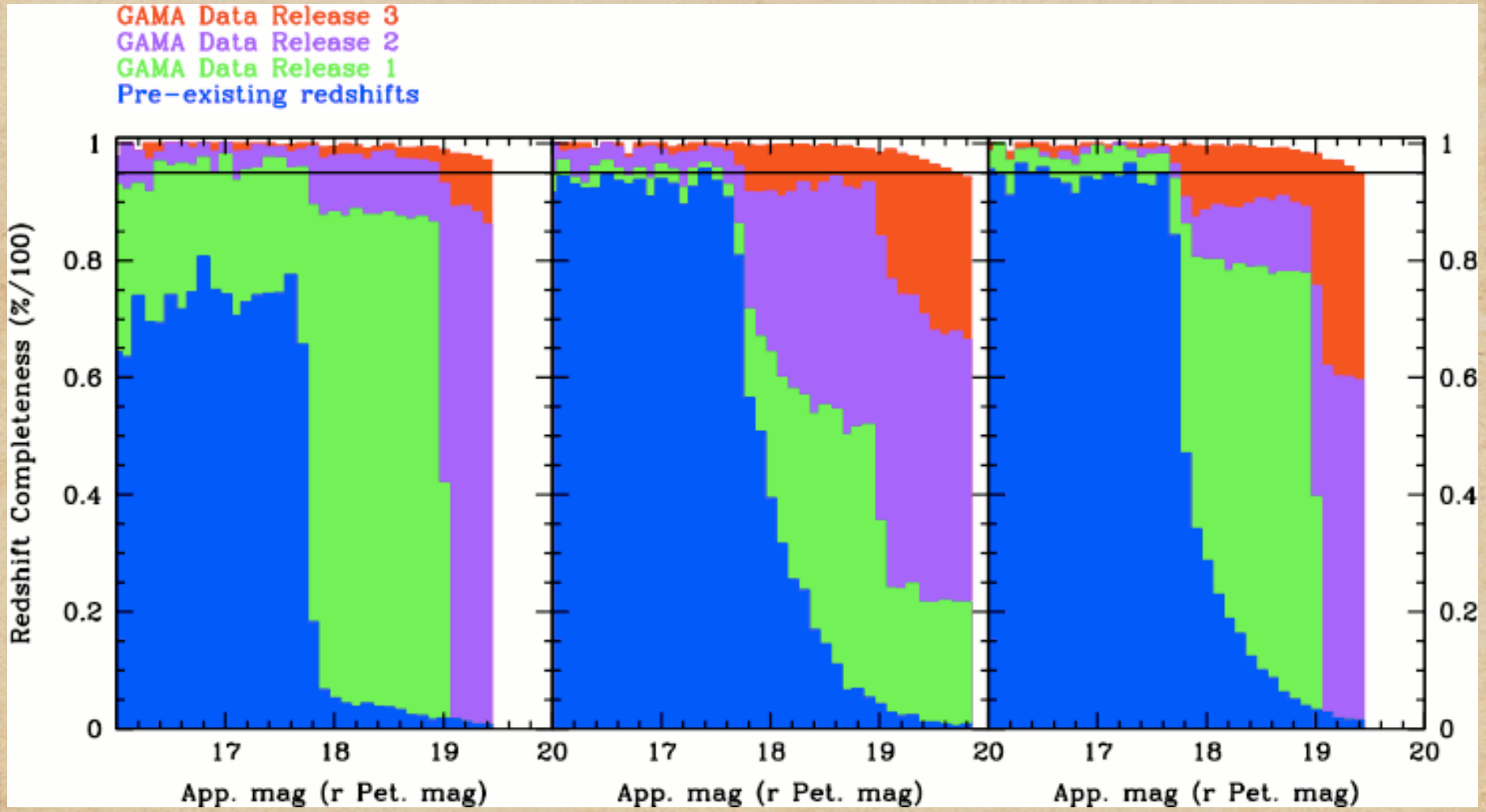
Driver et al 2010, in prep

Redshift distribution

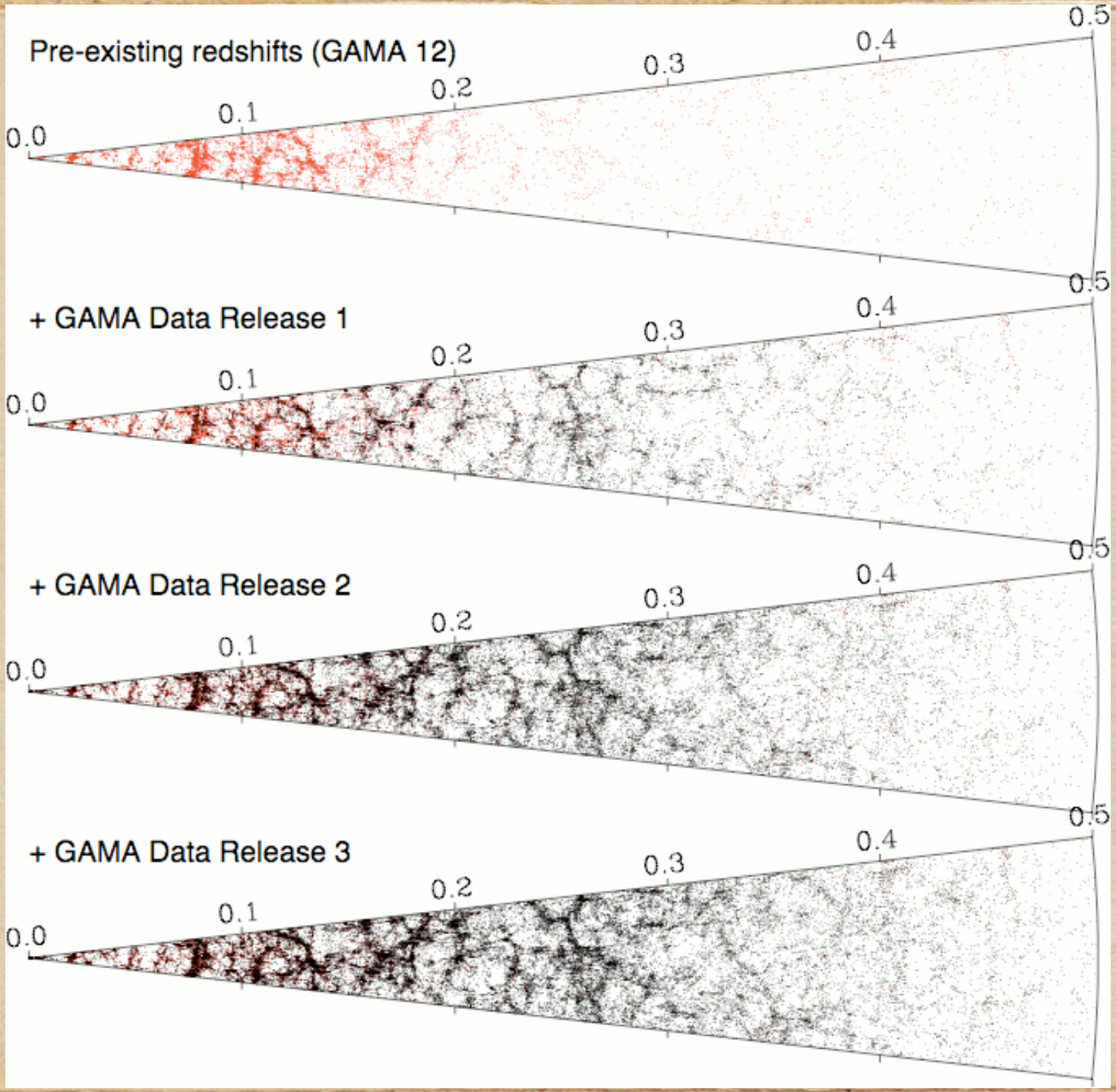


Driver et al 2010, in prep

Redshift completeness



Driver et al 2010, in prep

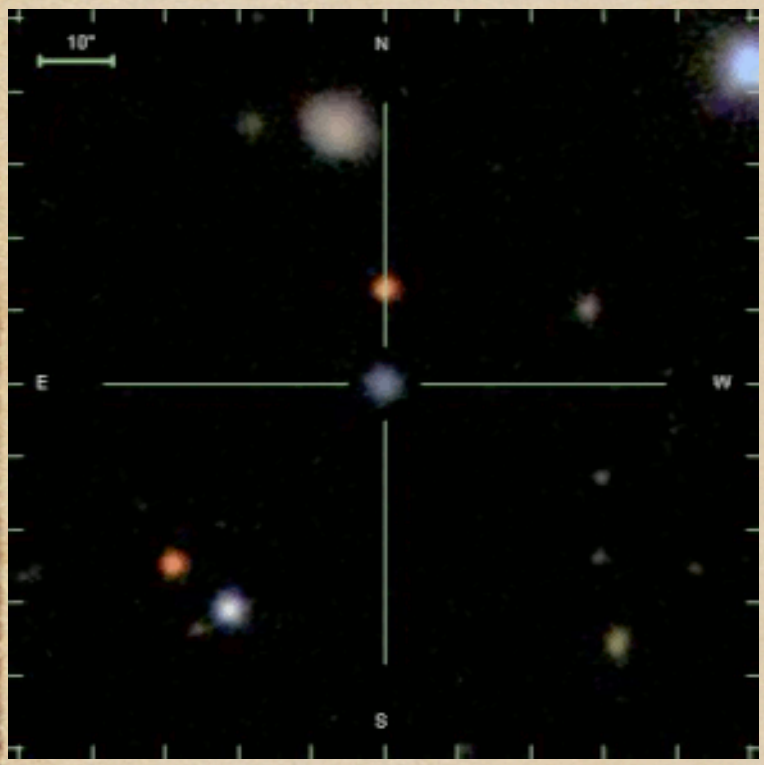


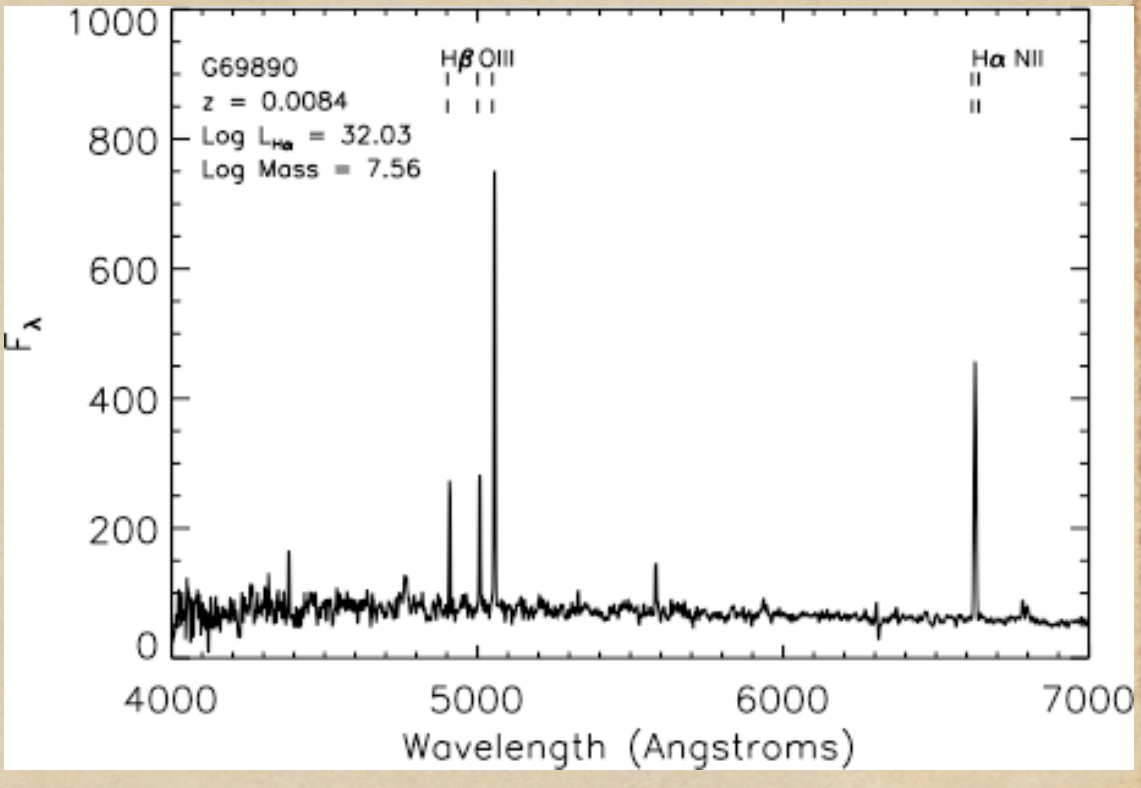
Driver et al 2010, in prep

GAMA DR1

- www.gama-survey.org
- Three 4x12deg equatorial regions (G09, G12, G15)
- ~120000 photometric objects, to r<19.4 (in G09, G15) and r<19.8 (in G12)
- ~60000 with redshifts available in DR1, out to z~0.6 (<z> ~ 0.2)
- Driver et al 2010, MNRAS (in prep)

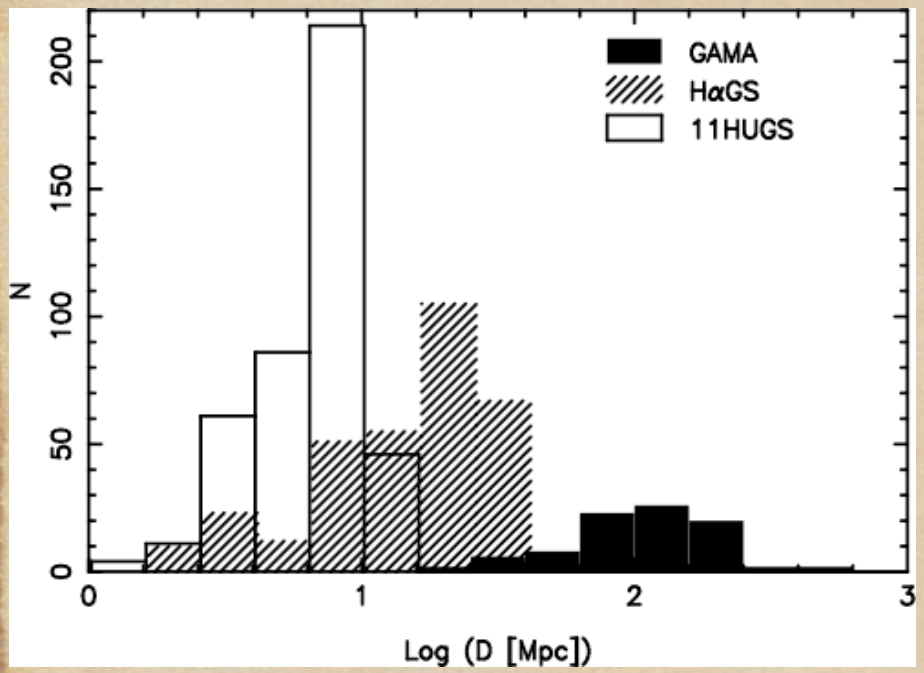
Little Blue Fuzzies

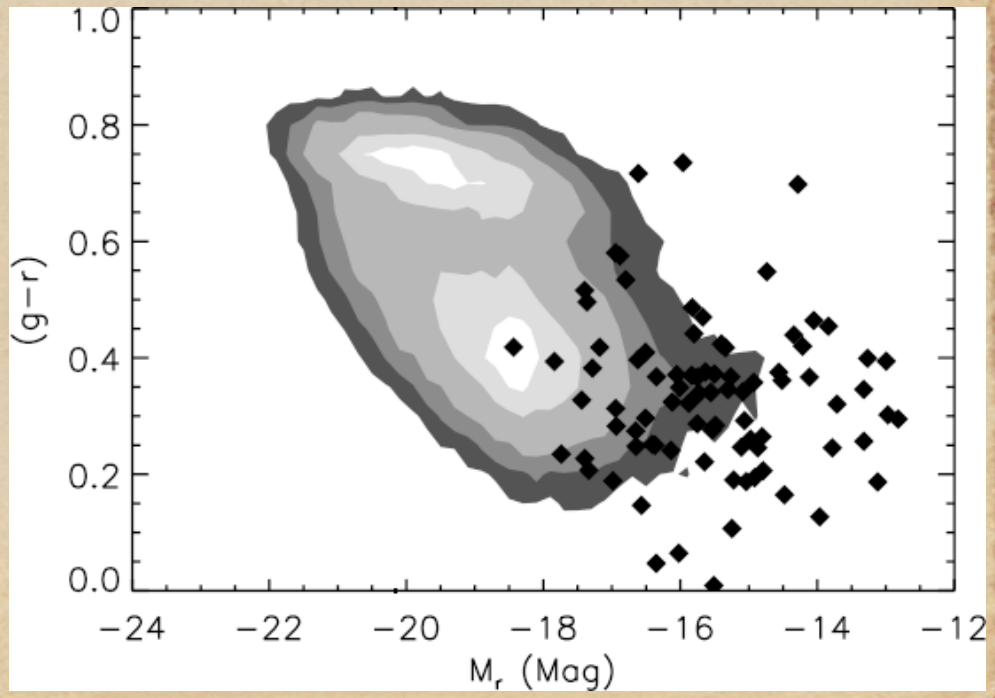




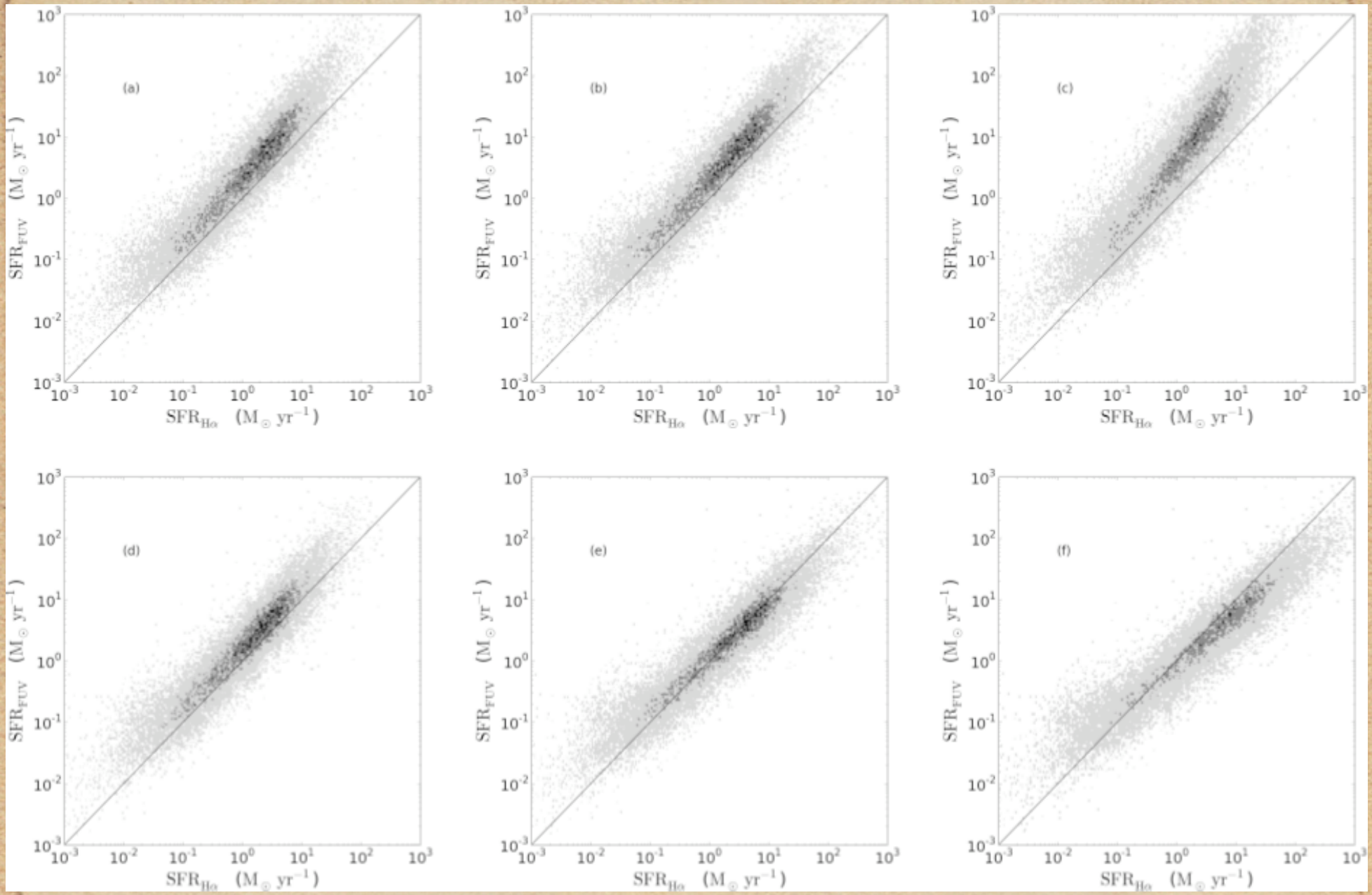
Brough et al., 2010, (in prep)

Slowest forming galaxies



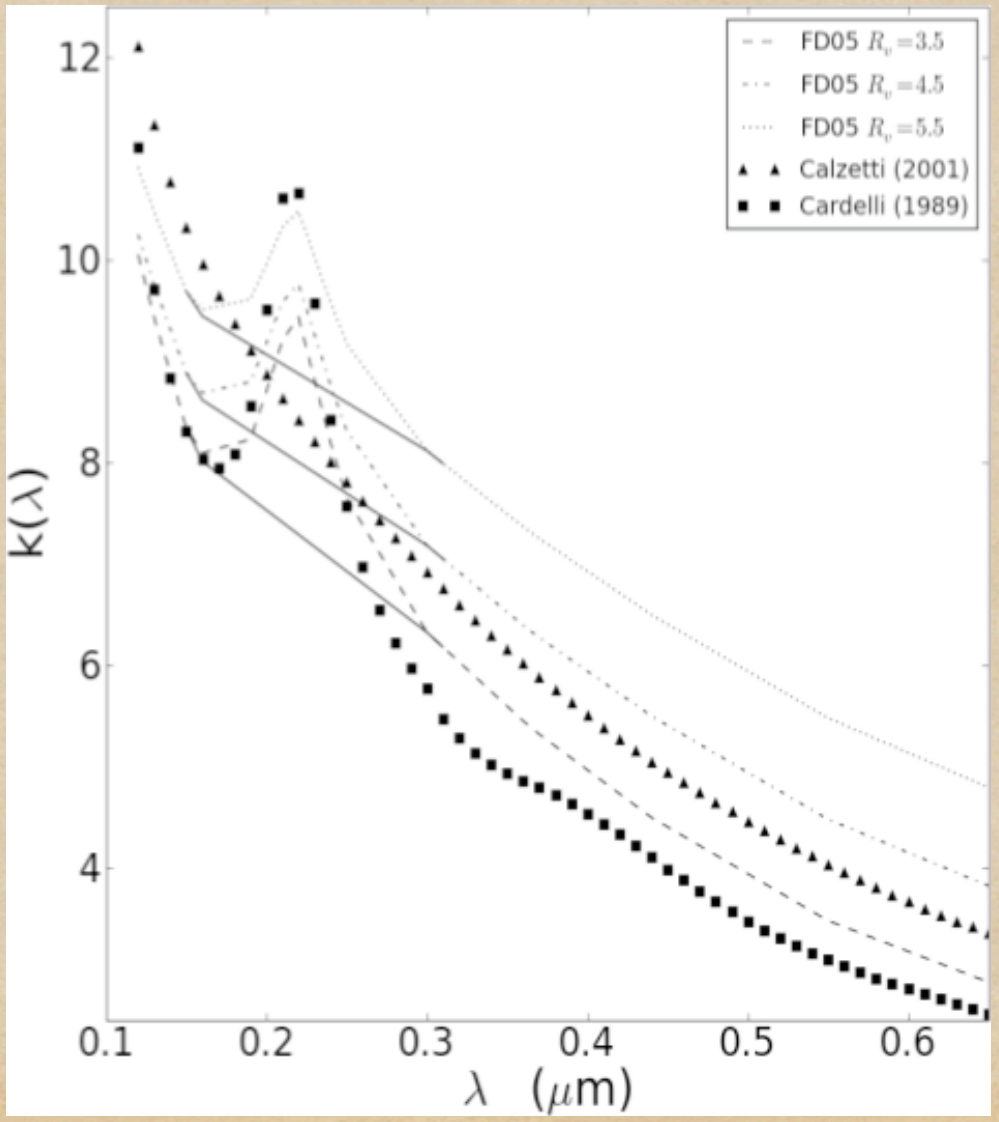


Brough et al., 2010, (in prep)



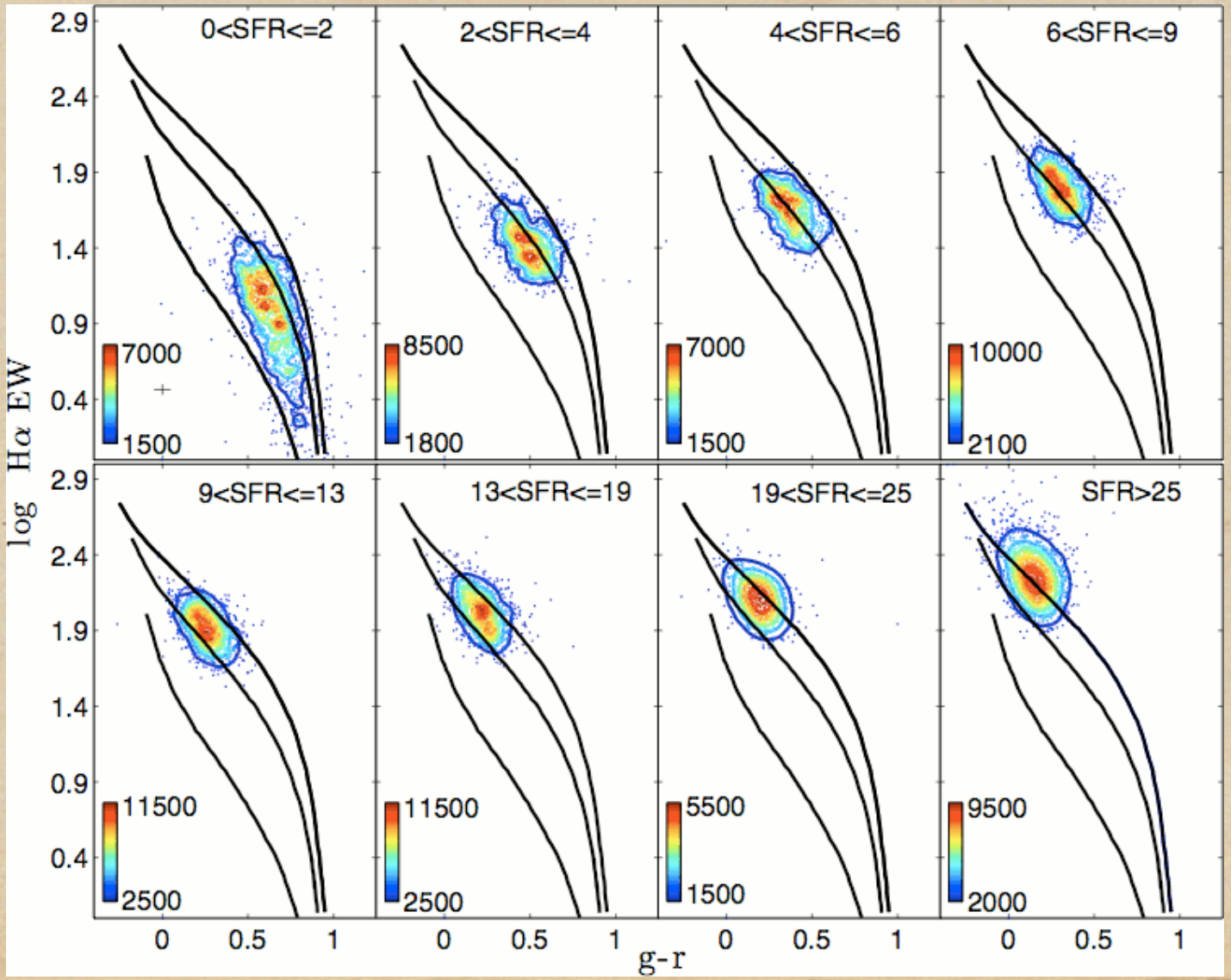
Wijesinghe et al., 2010, MNRAS (submitted)

Obscuration curves



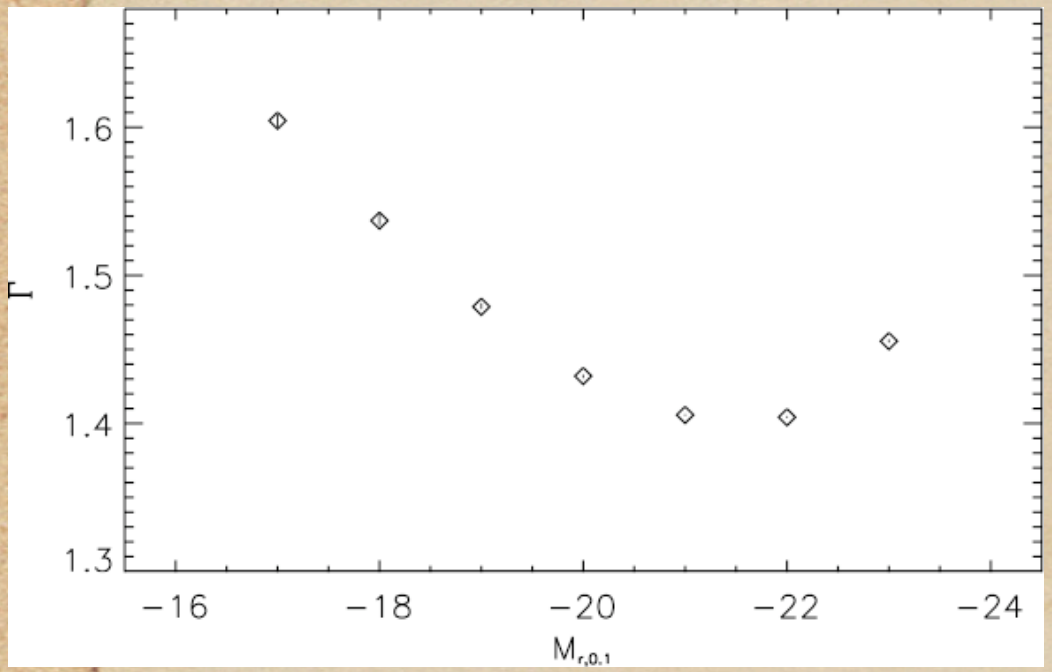
Wijesinghe et al., 2010, MNRAS (submitted)

SFR-dependence of the IMF

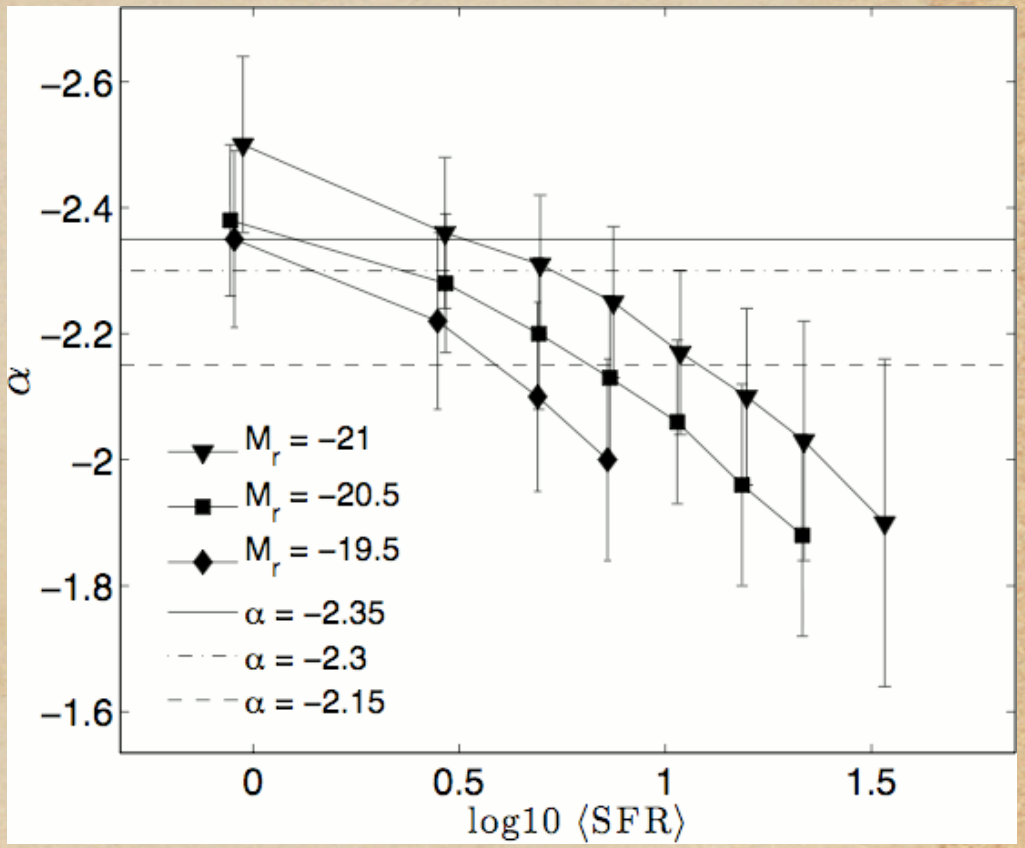


Gunawardhana 2010, in prep

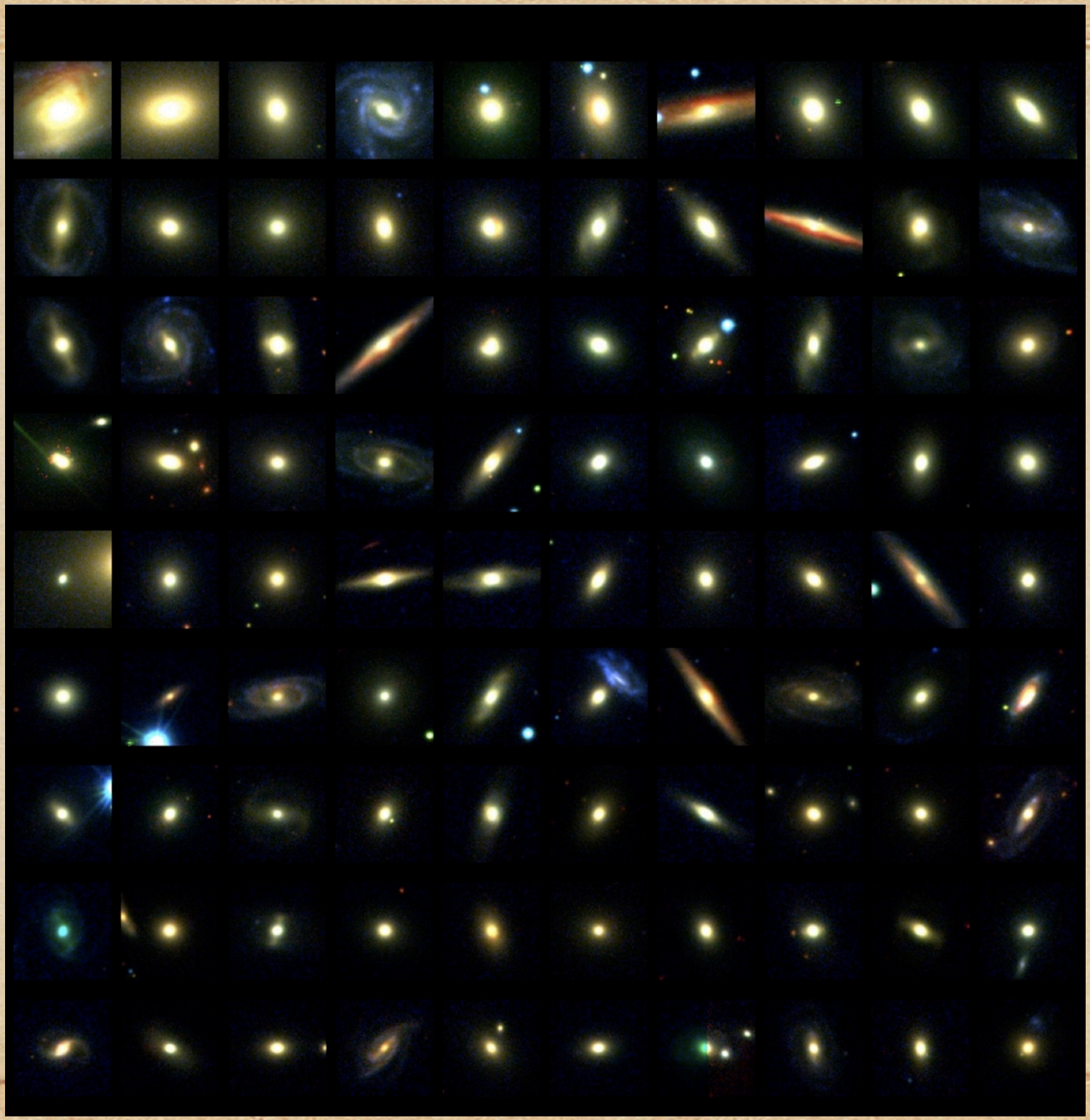
IMF dependence on SFR

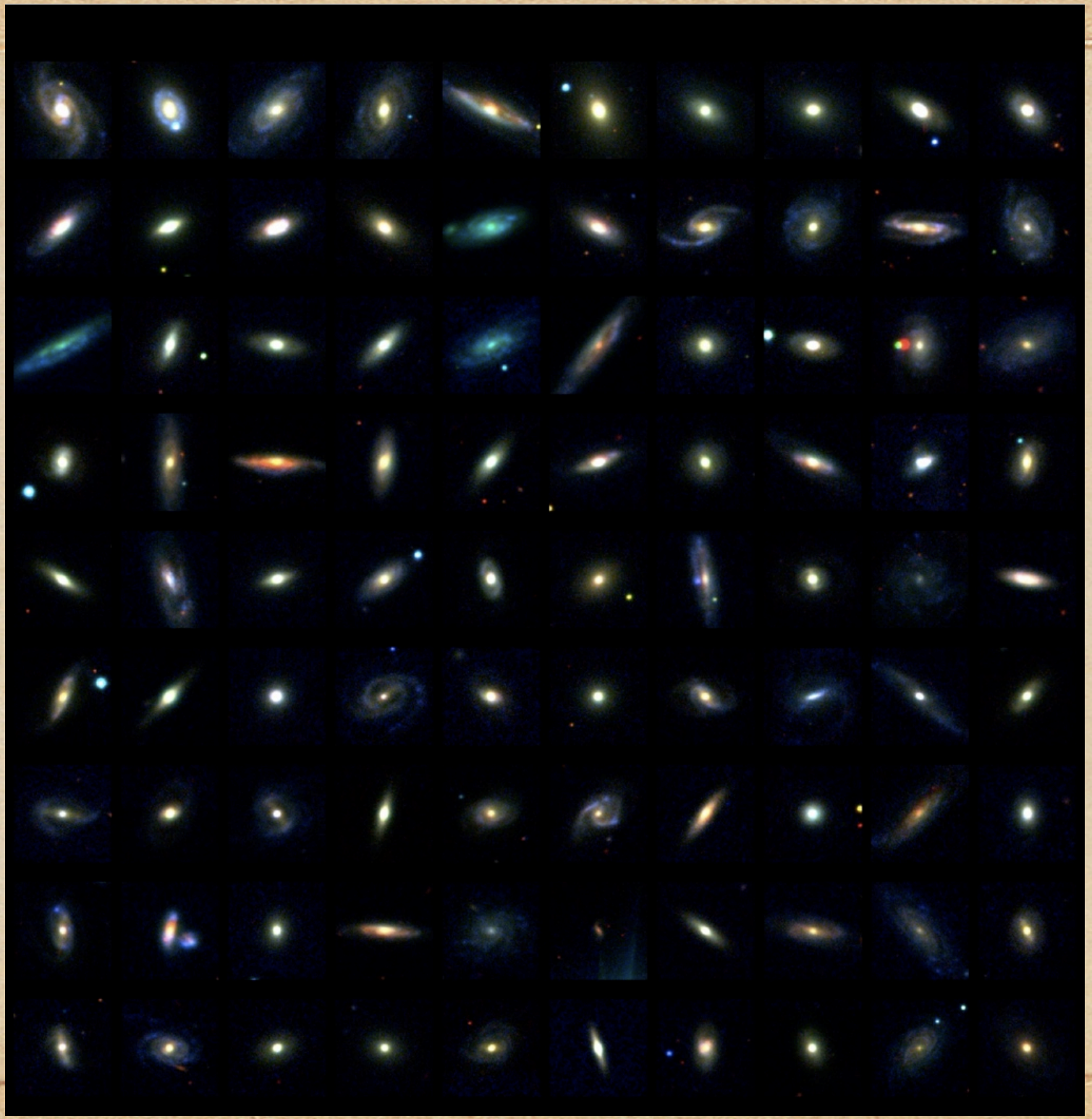


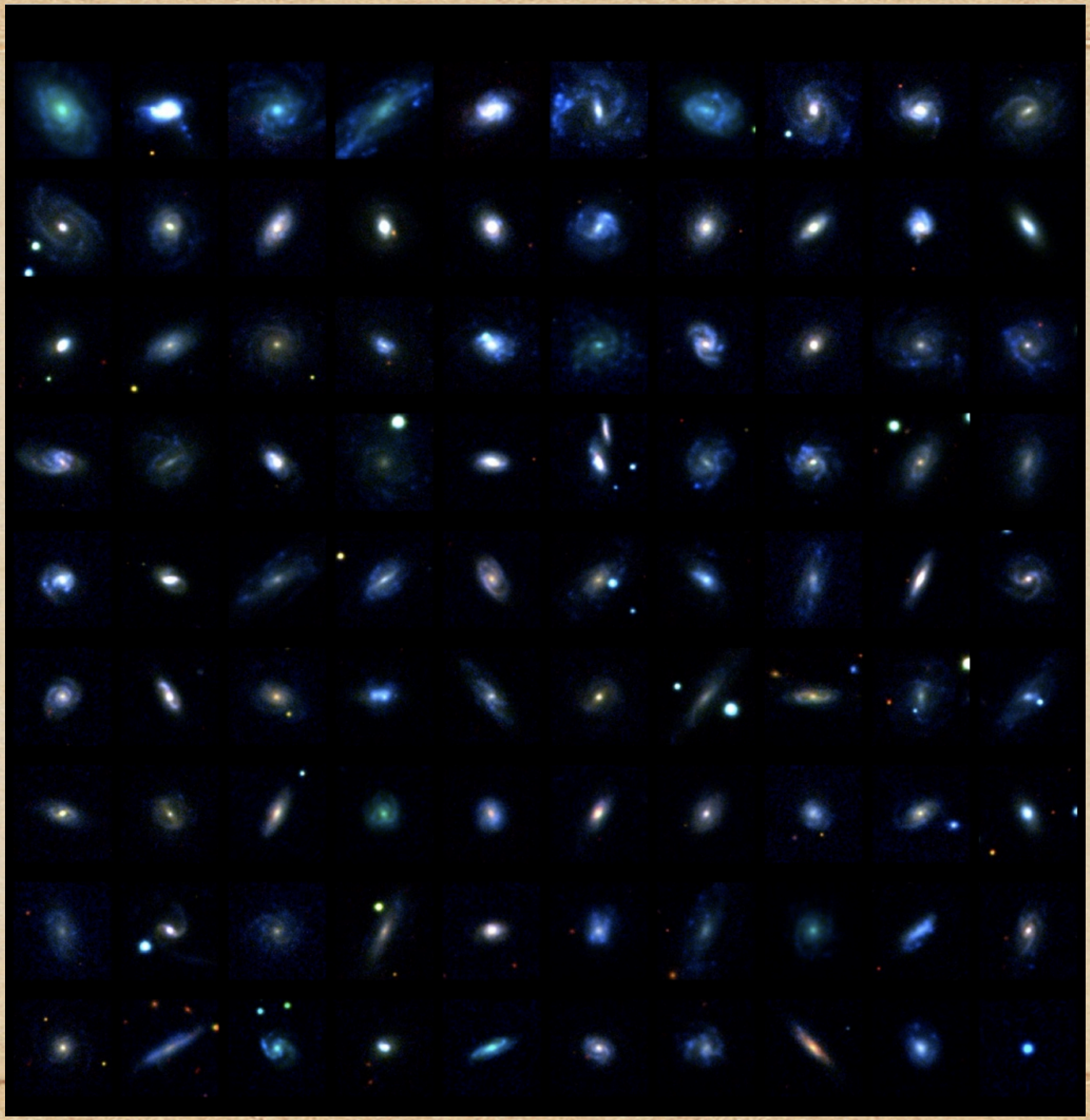
Hoversten & Glazebrook, 2008, ApJ, 675, 163



Gunawardhana 2010, in prep







Summary

- GAMA has been remarkably successful to date, with lots of exciting science being produced:
- Some of the most distant dwarf star-forming galaxies yet measured
- Uniform and self-consistent obscuration corrections
- Evidence for a SFR-dependence in the IMF slope
- DR1 available at www.gama-survey.org