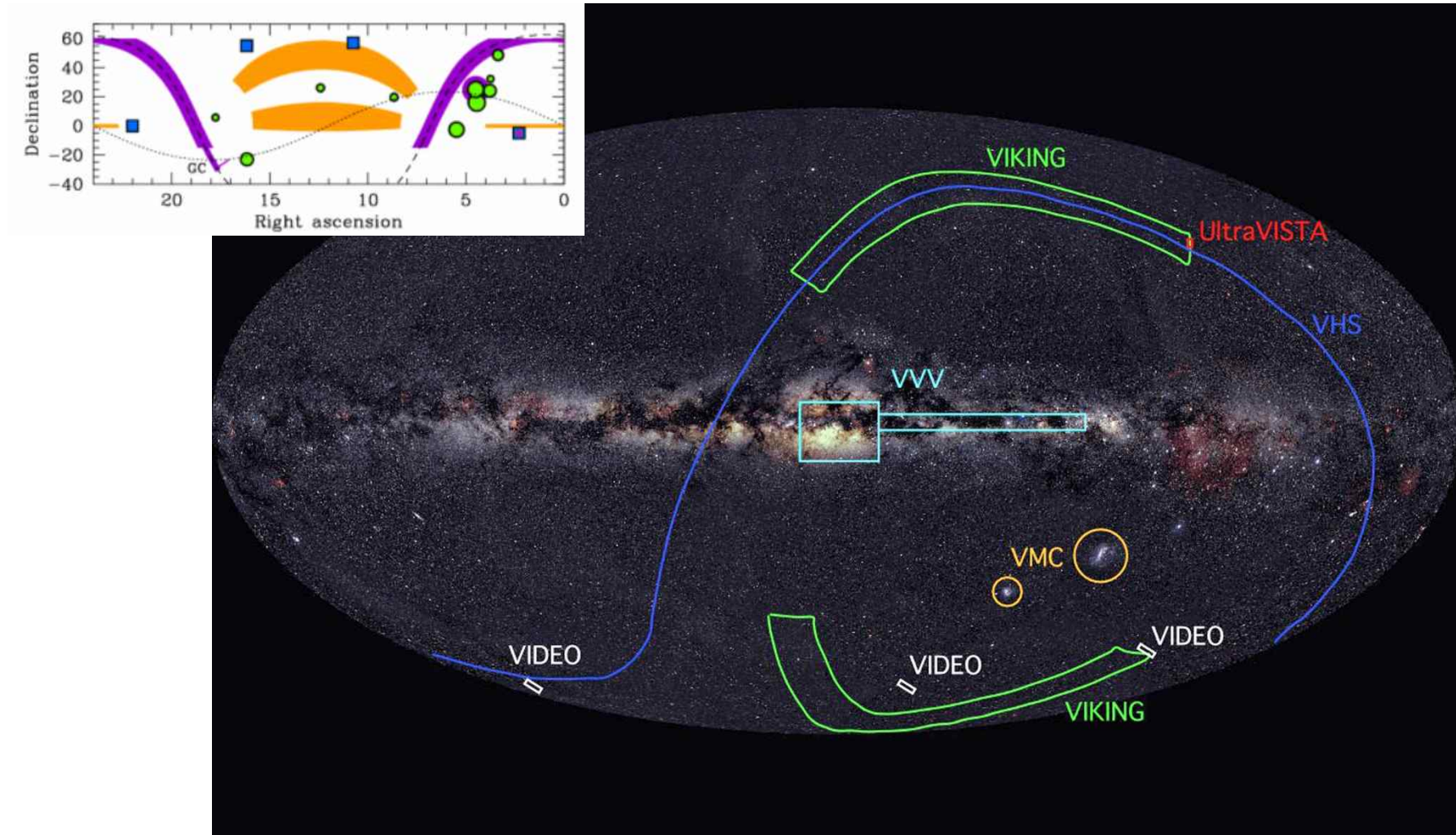
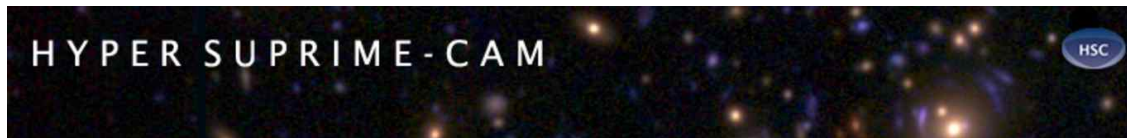


Galaxies in High-z Clusters

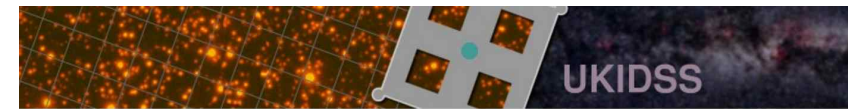


2016. 12. 15.
Jae-Woo Kim (KASI)

Survey Era



Infrared Medium-deep Survey

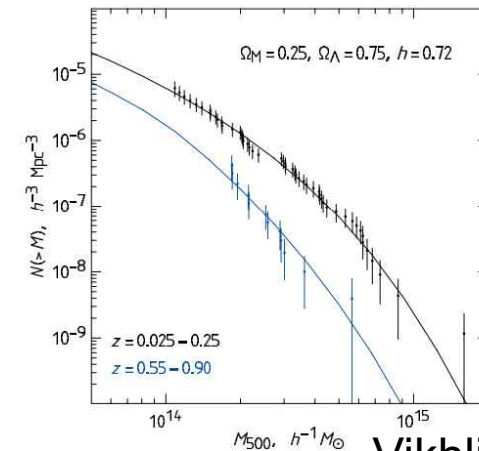


Galaxy Cluster

Galaxy Cluster = Massive Dark Matter Halo

Cluster Mass Function = Halo Mass Function

- Number Counts
- Cosmology



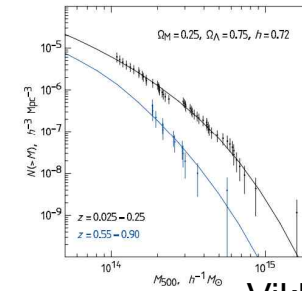
Vikhlinin+09

Galaxy Cluster

Galaxy Cluster = Massive Dark Matter Halo

Cluster Mass Function = Halo Mass Function

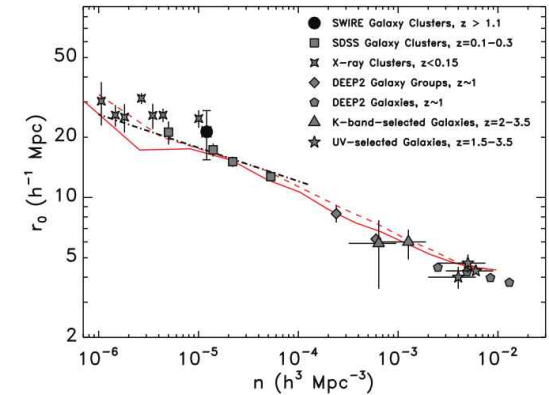
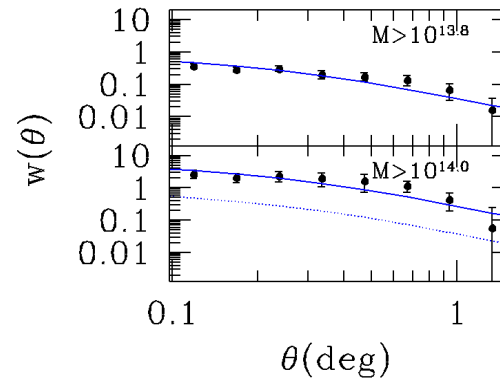
- Number Counts
- Cosmology



Vikhlinin+09

Clustering of Galaxy Clusters

- Clustering Strength
- Halo Bias



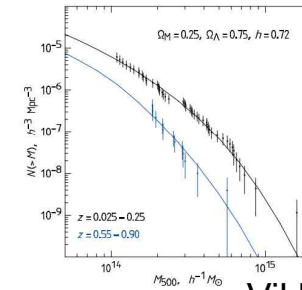
Papovich+08

Galaxy Cluster

Galaxy Cluster = Massive Dark Matter Halo

Cluster Mass Function = Halo Mass Function

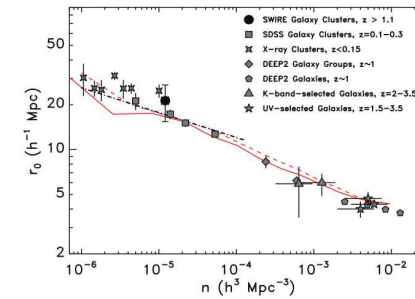
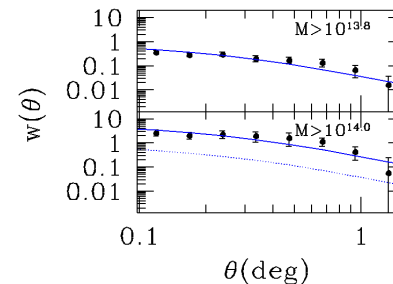
- Number Counts
- Cosmology



Vikhlinin+09

Clustering of Galaxy Clusters

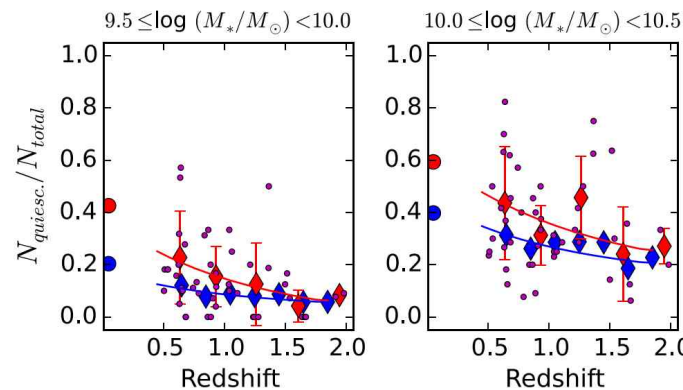
- Clustering Strength
- Halo Bias



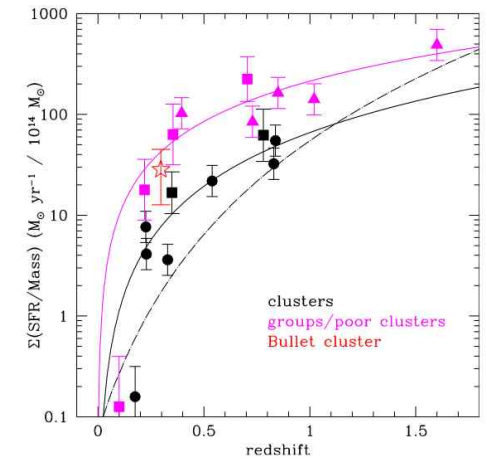
Papovich+08

Star Formation in Clusters at High-z

- Star Formation Activity
- Passive Fraction
- Galaxy Evolution



Lee+15

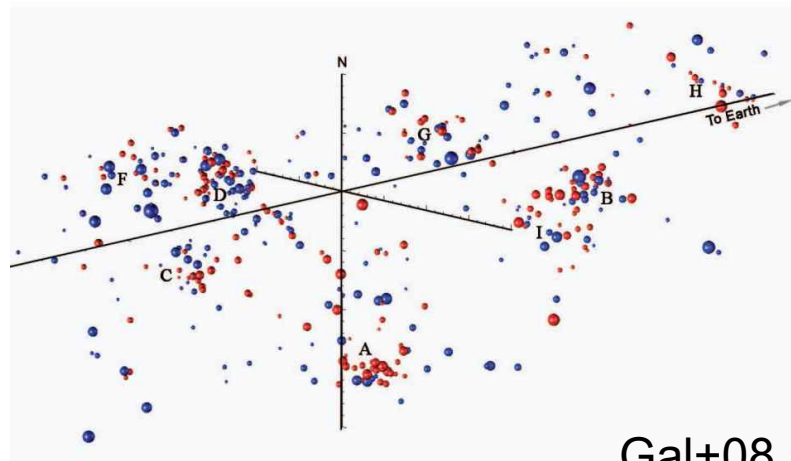


Popesso+12

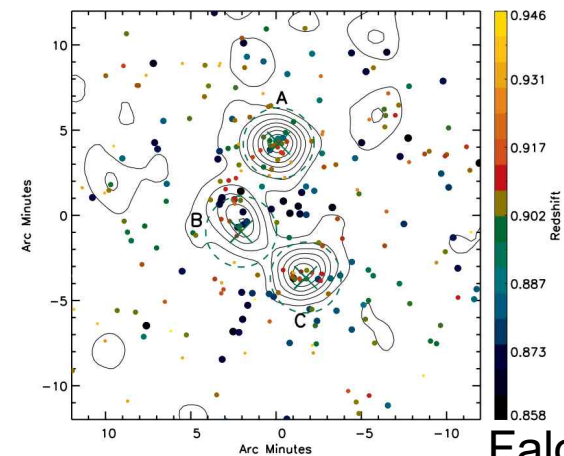
Supercluster

Massive Large Scale Structure

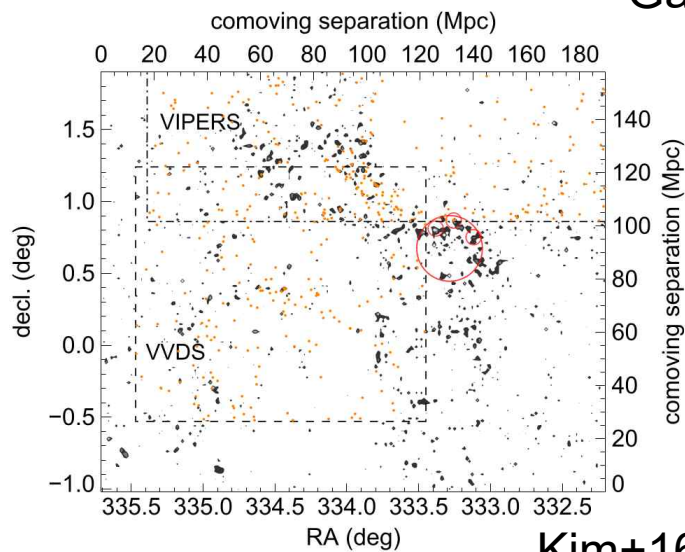
Past of Low-z Massive Clusters



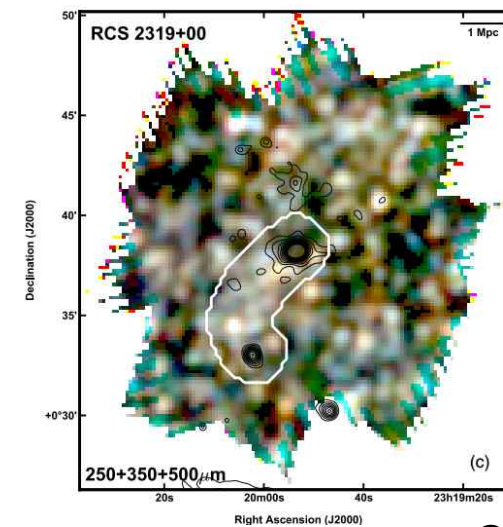
Gal+08



Faloon+13



Kim+16

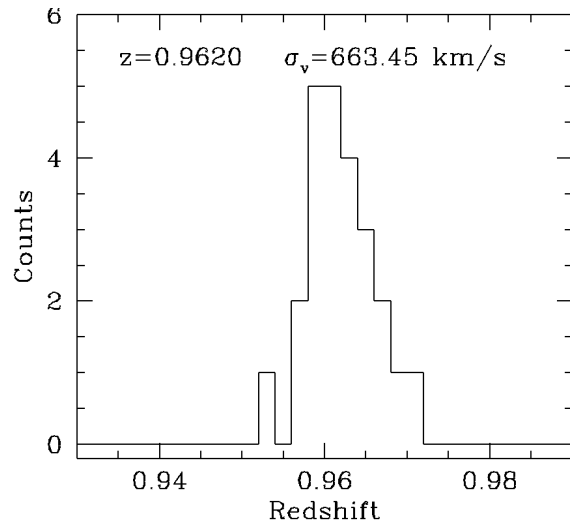


Coppin+12

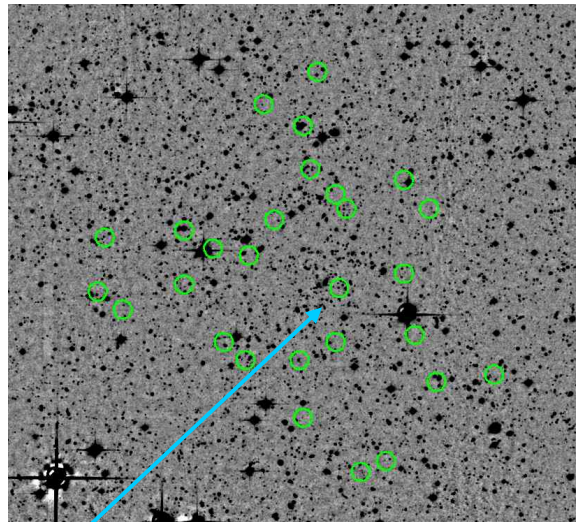
Submm View

IMSCI J0853-0344

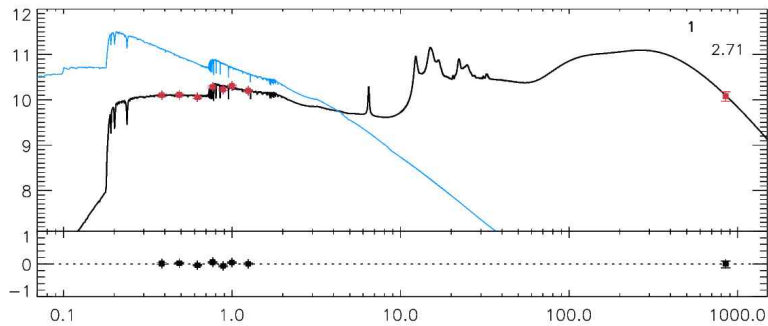
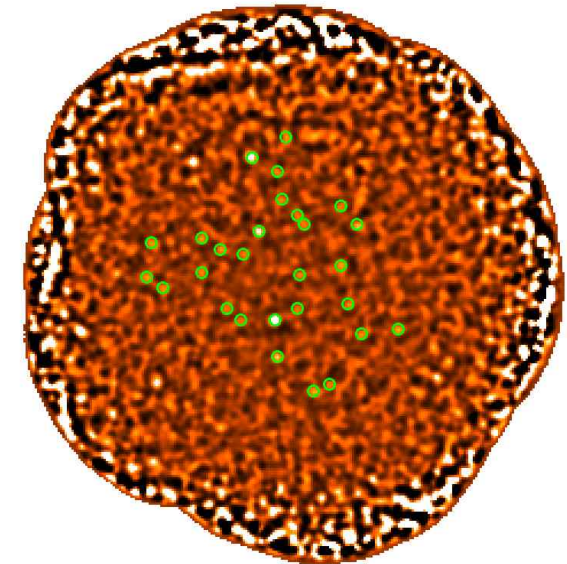
IMACS+GMOS



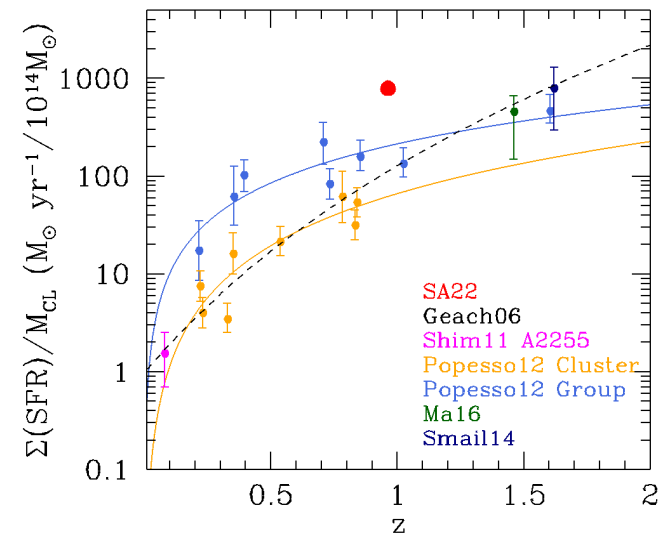
i-band



SCUBA2 850um

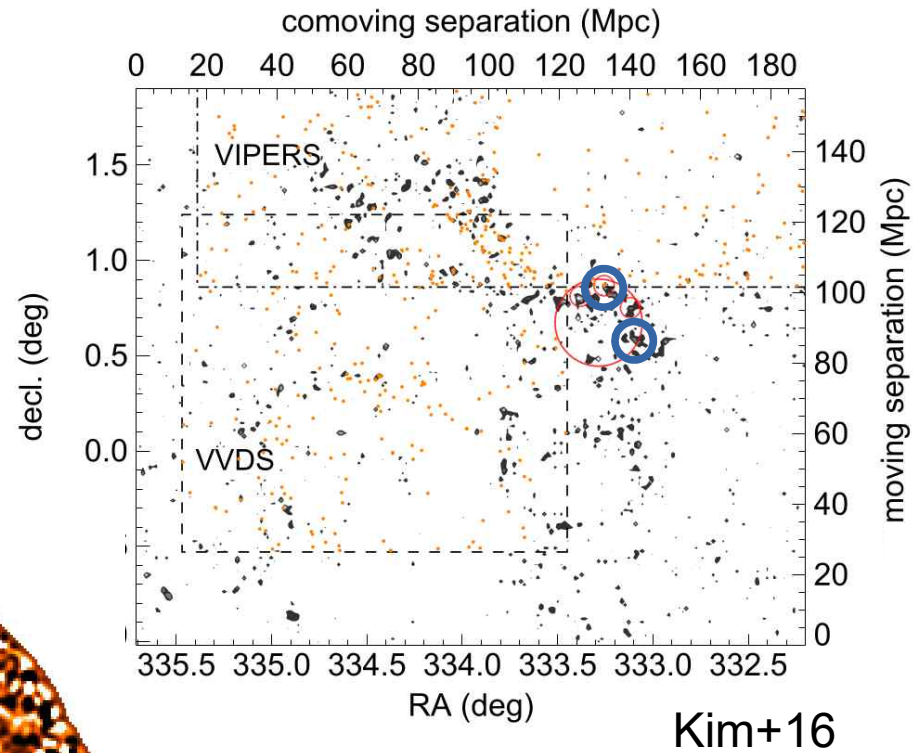
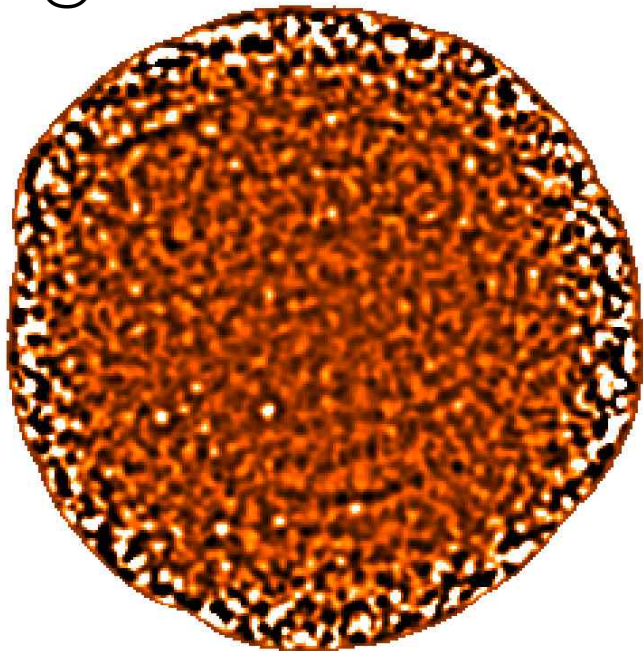


SFR = 24 Msun/yr
 $M_{\text{dust}} = 1 \times 10^9$ Msun

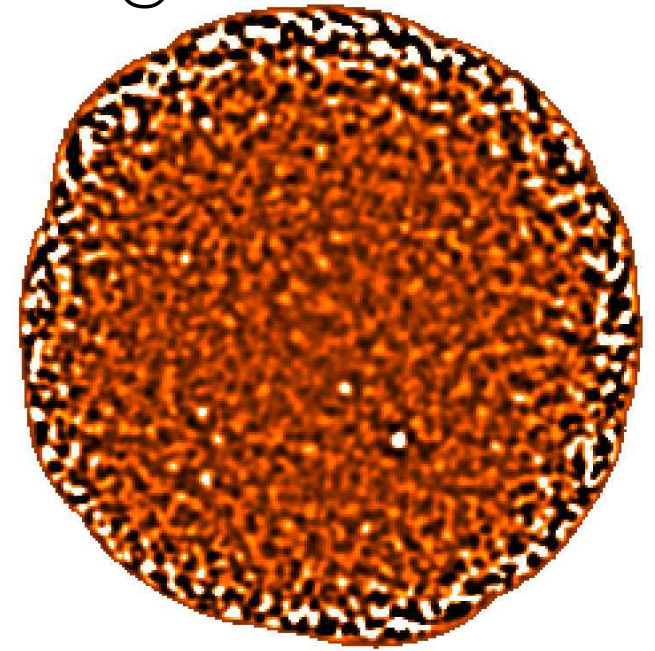


Submm View

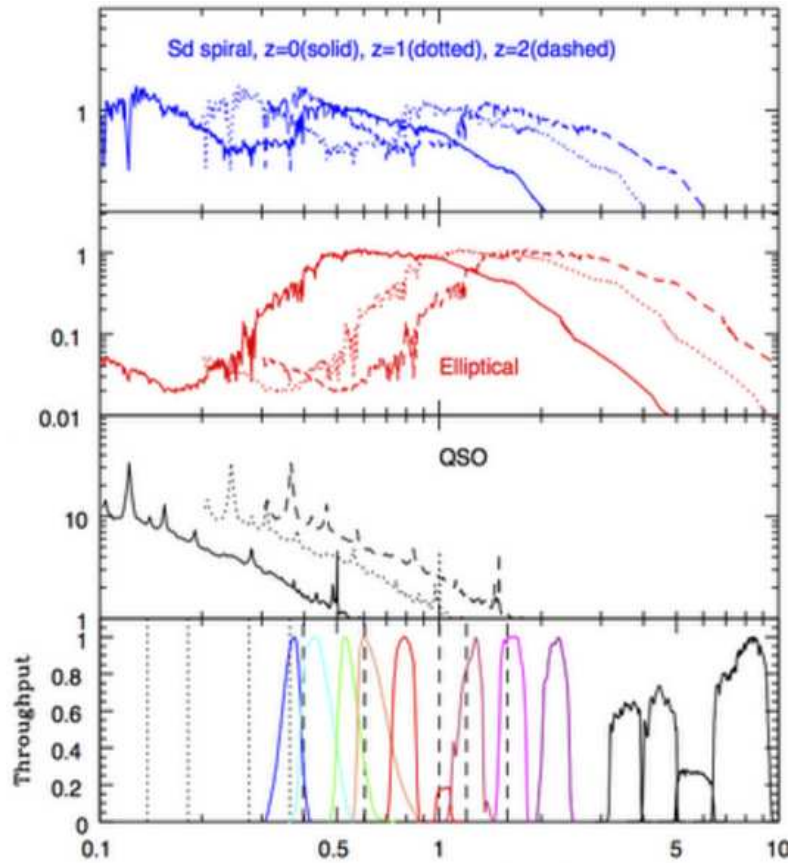
IMSCI J2213+0052
@ $z \sim 0.9$



IMSCI J2212+0035
@ $z \sim 0.9$

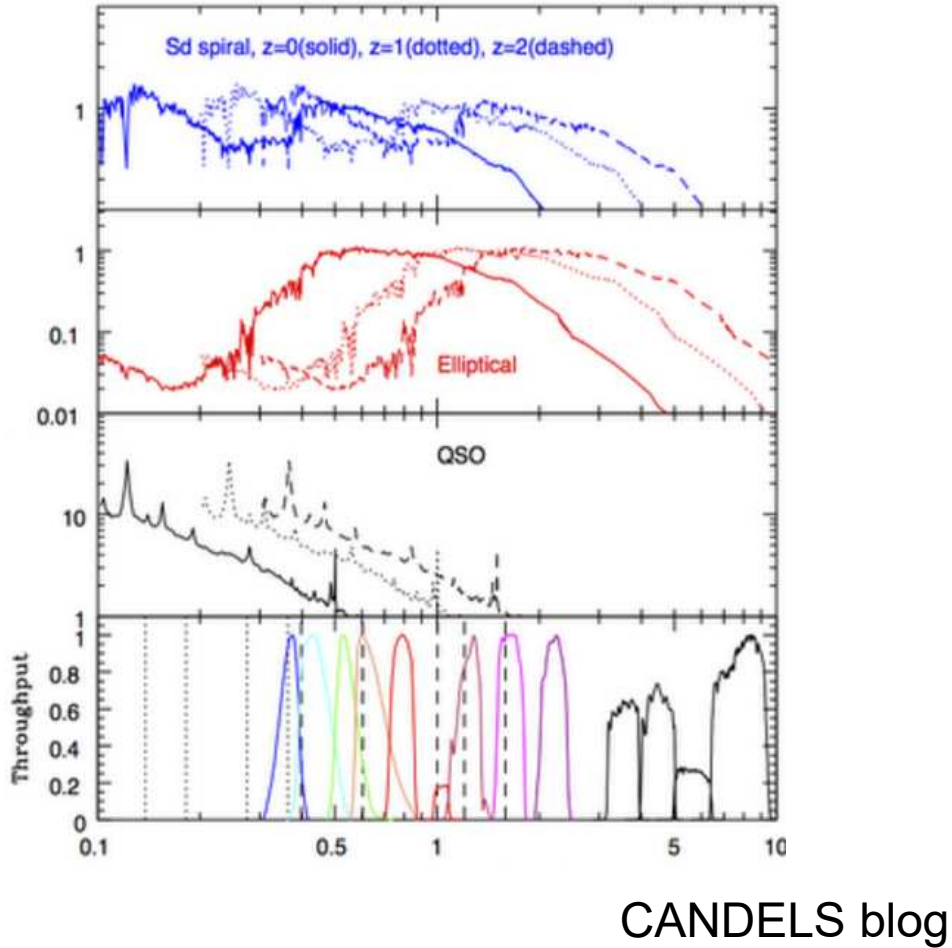


Importance of IR Data

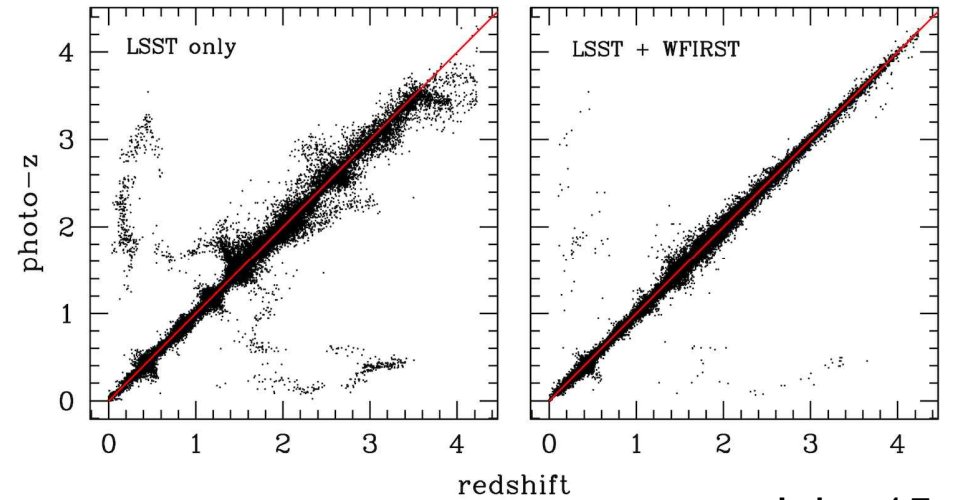


CANDELS blog

Importance of IR Data



Phot-z Accuracy



Jain+15

Galaxy Property

