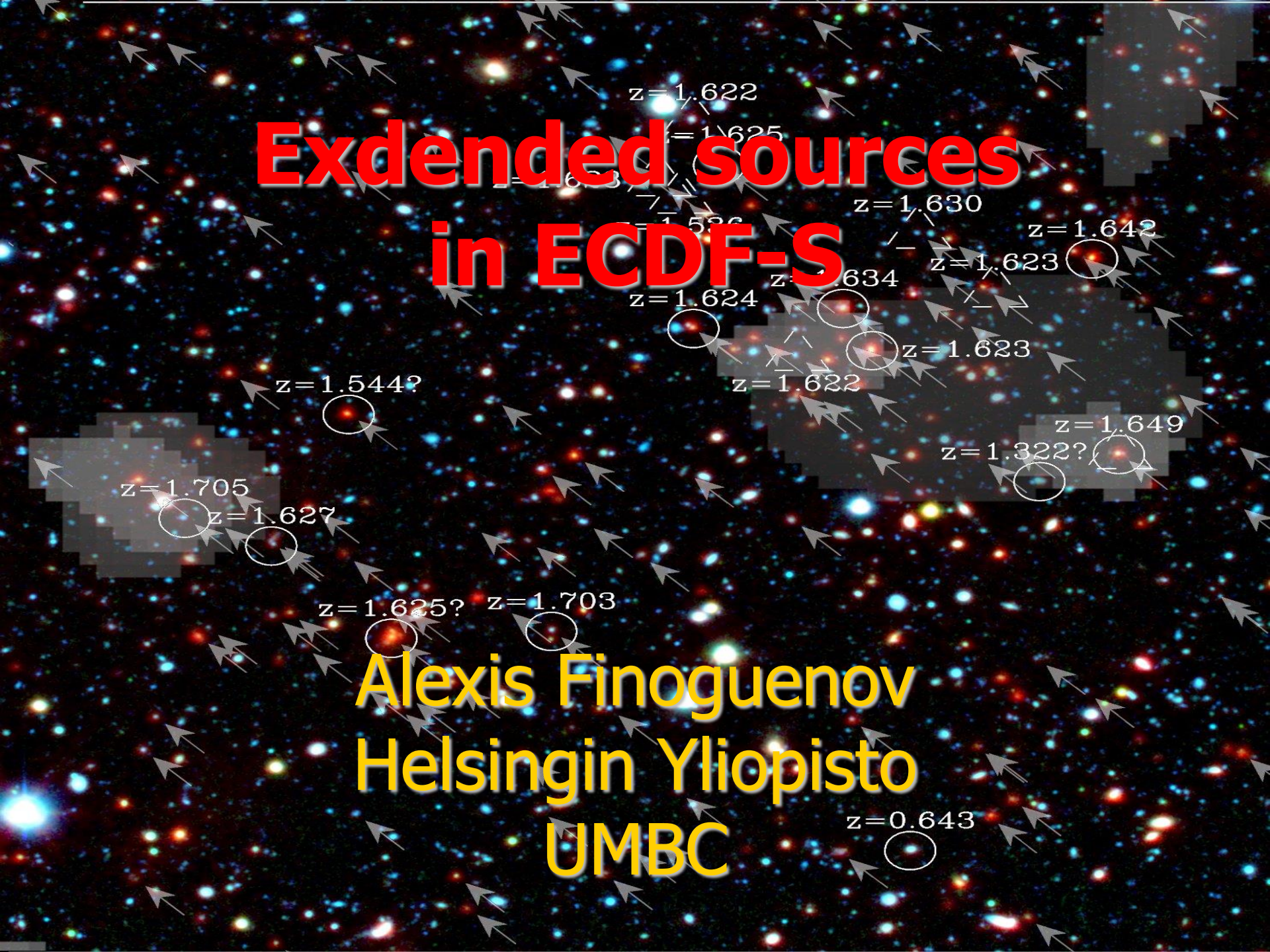
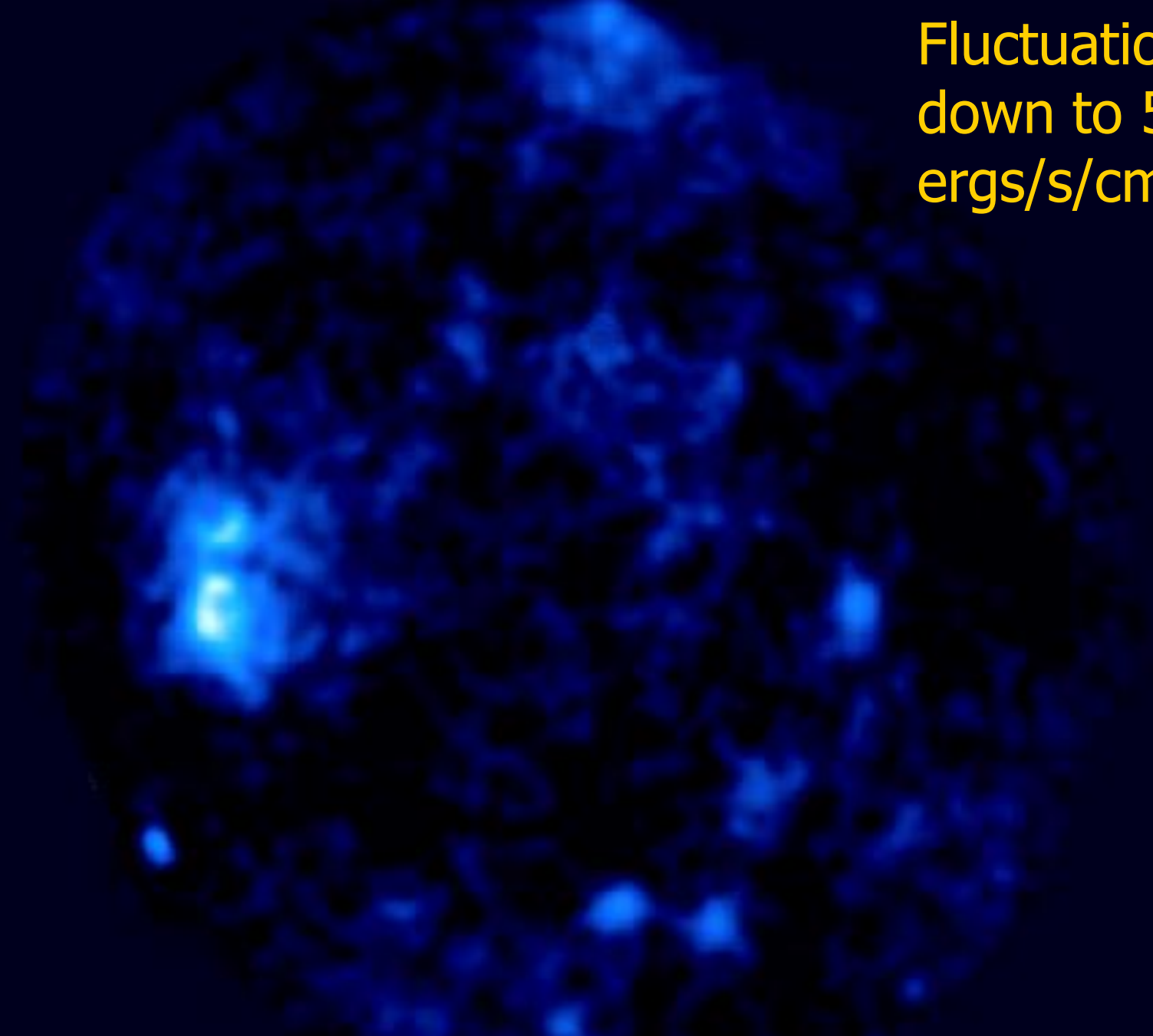


Extended sources in ECDF-S

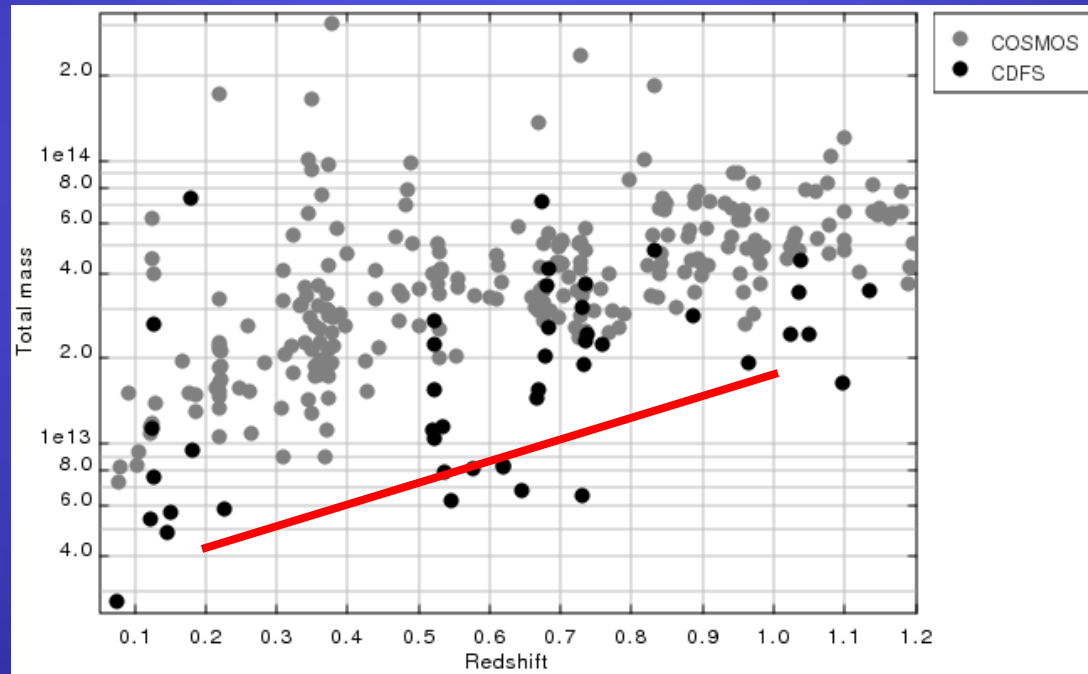
Alexis Finoguenov
Helsingin Yliopisto
UMBC



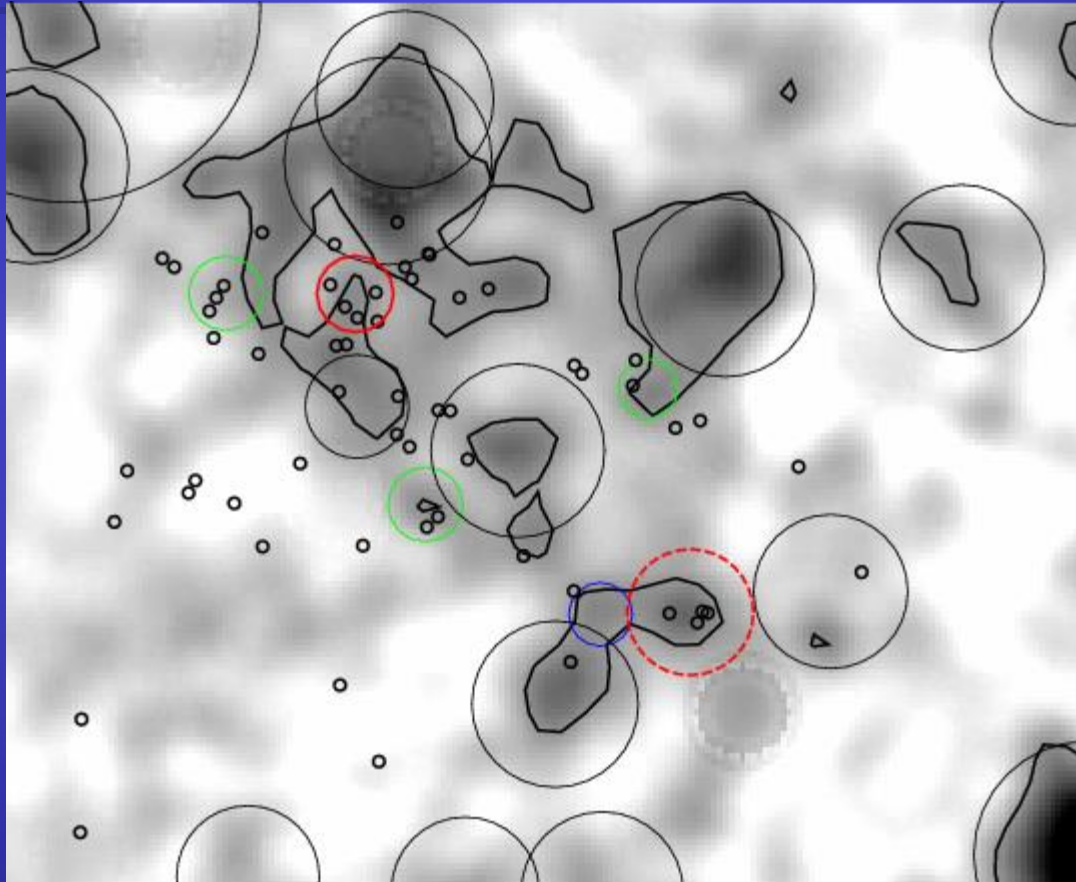
Fluctuations
down to 5×10^{-17}
ergs/s/cm²



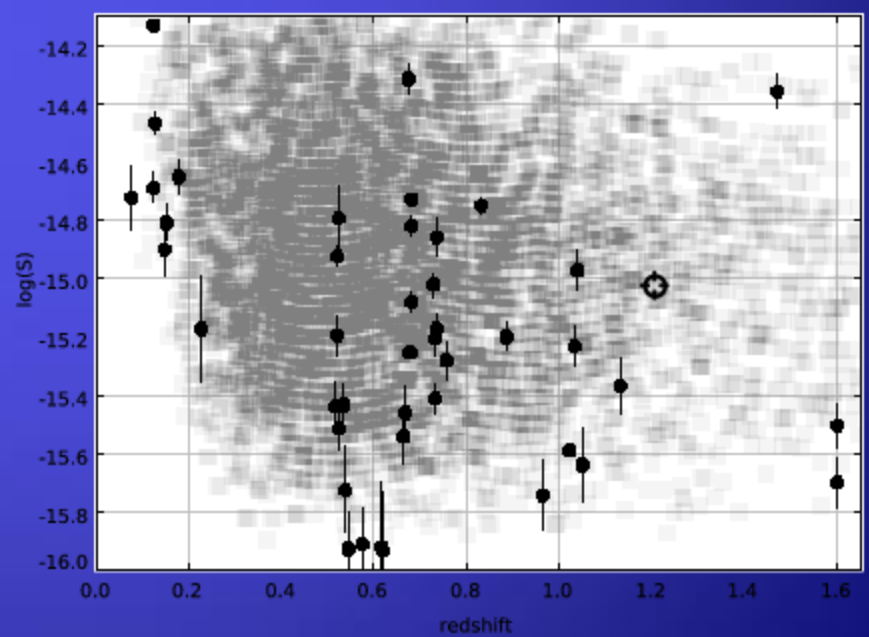
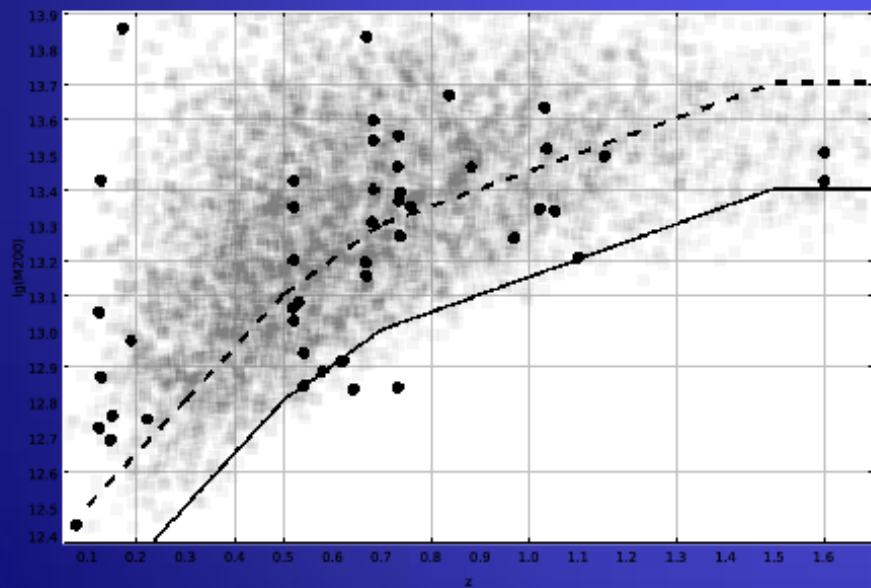
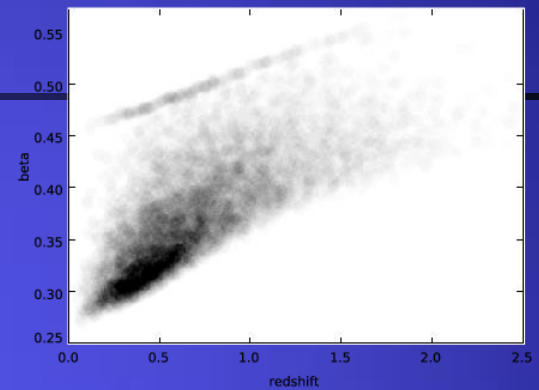
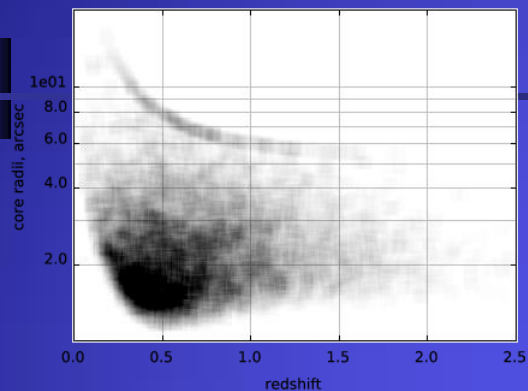
CDFS vs COSMOS



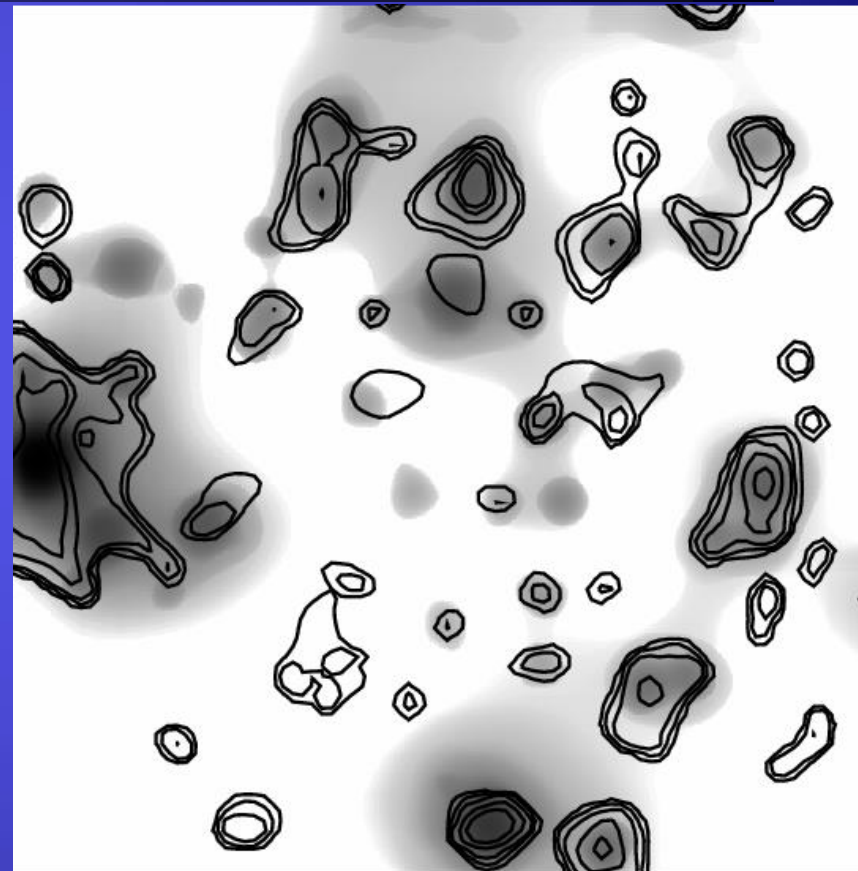
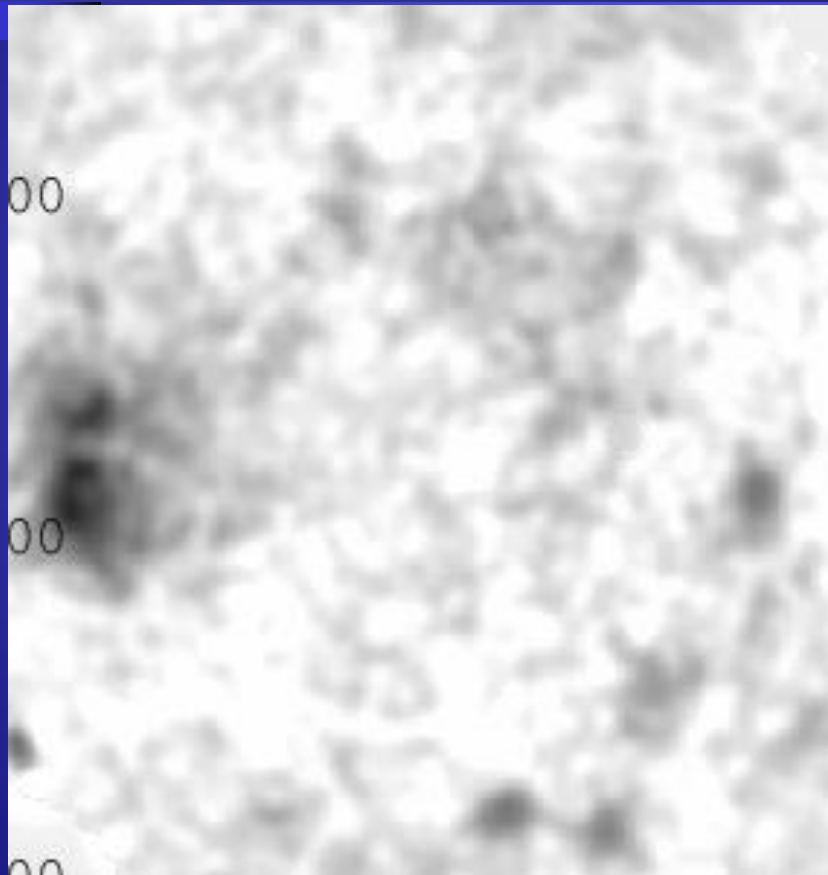
Kirk structure at $z=1.6$



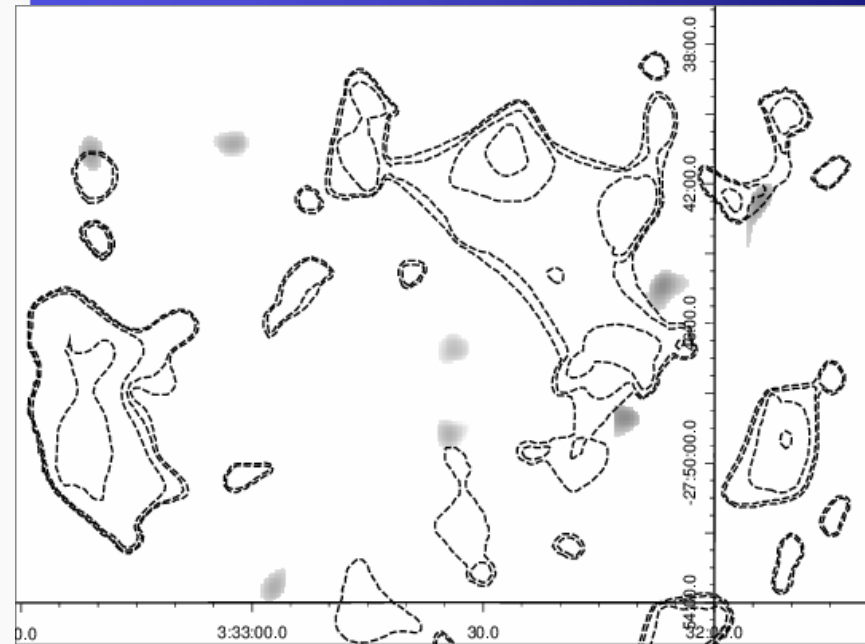
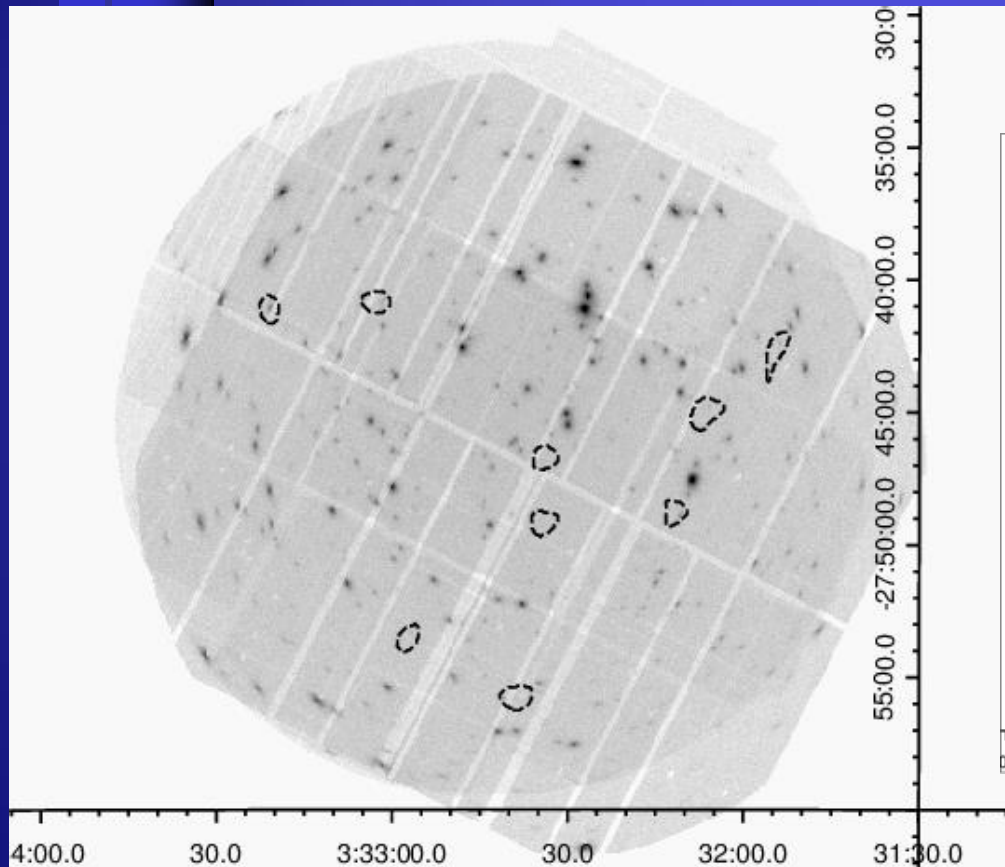
Random catalog



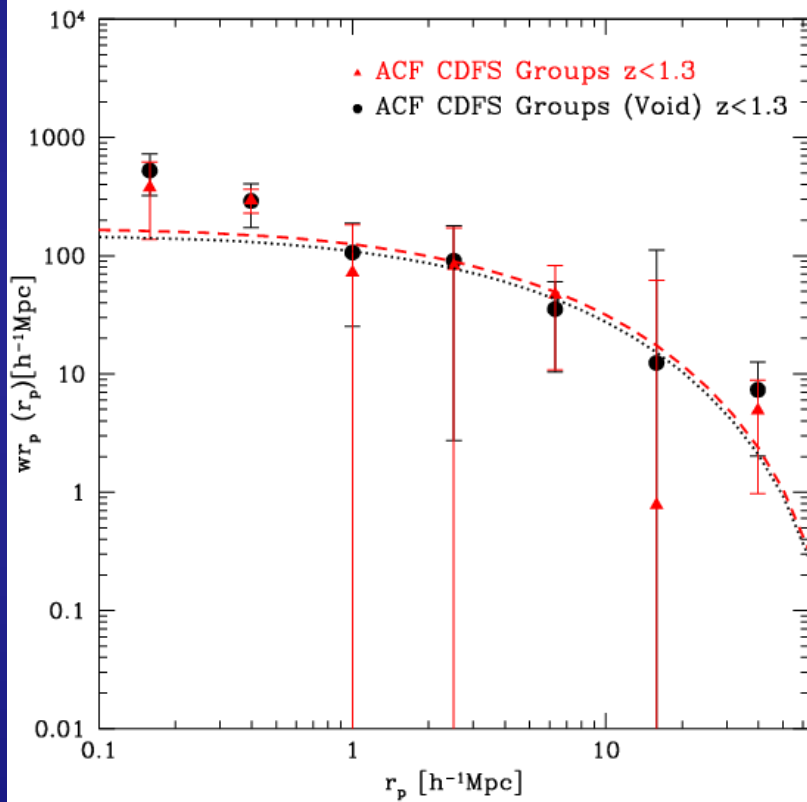
Reproducing the observed emission



Simulated contamination by point sources



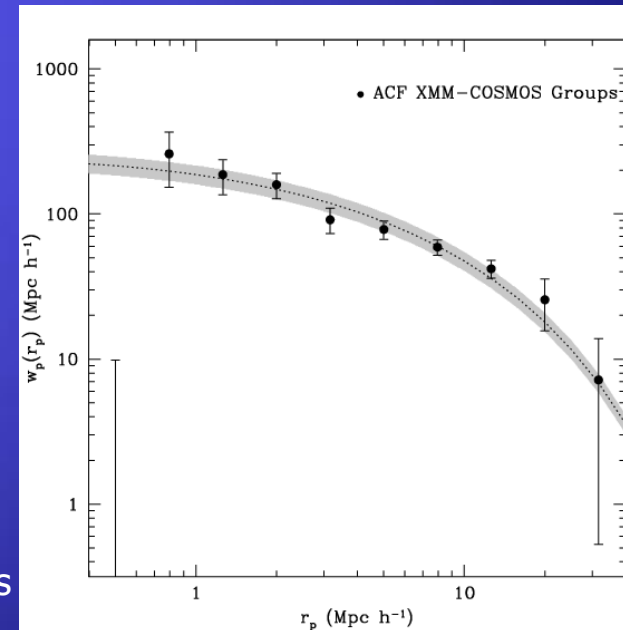
ACF of galaxy groups



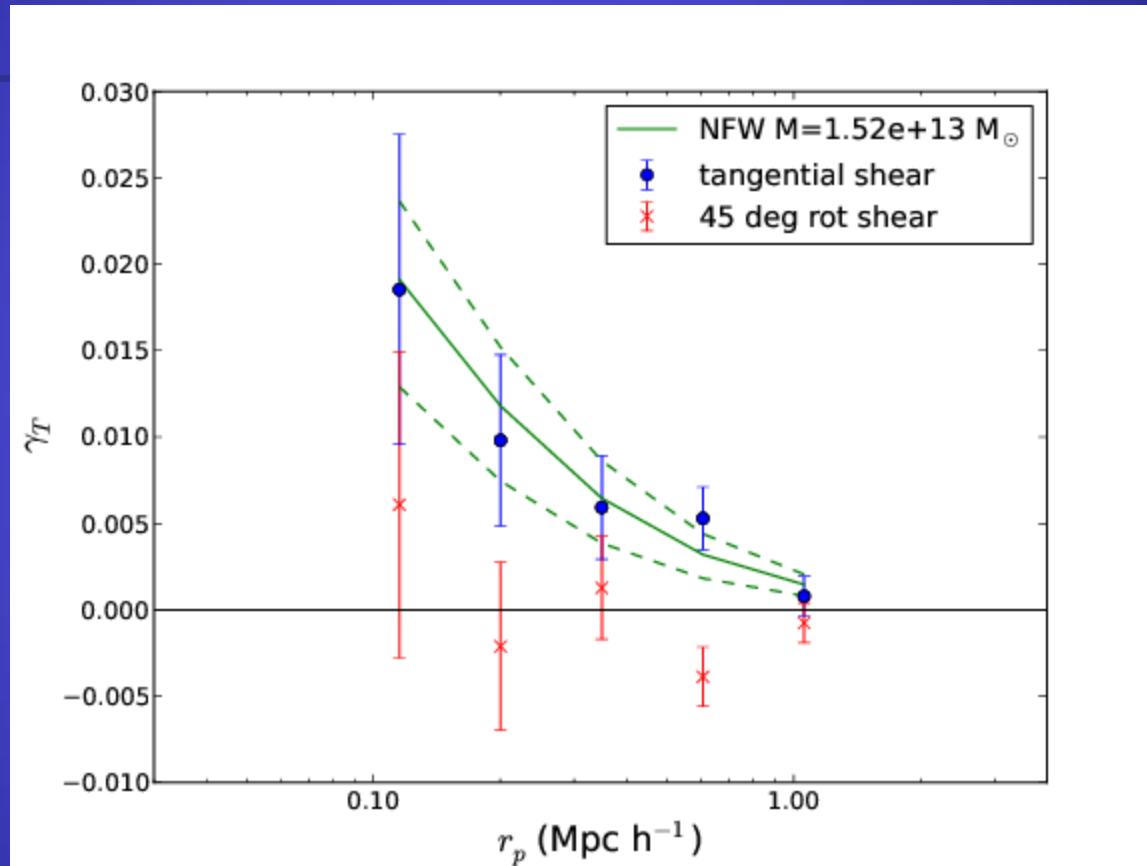
Alexis Finoguenov

CDFS: extended sources

$b_{\text{obs}}/b_{\text{model}} = 1.1 \pm 0.1$
This constrains the deviations
from the assumed scaling relation
to be $< 30\%$ in total mass.



Lx-Mass from weak lensing (GEMS)

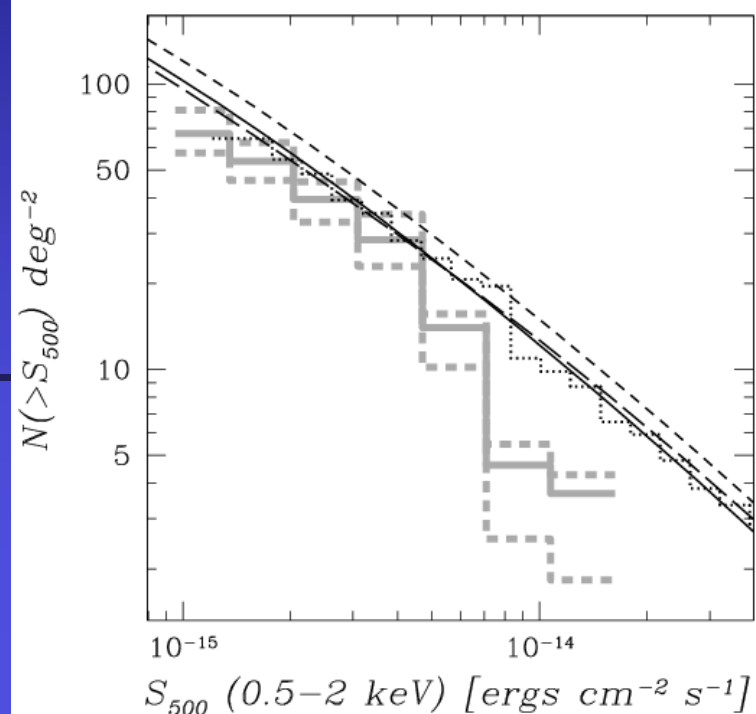
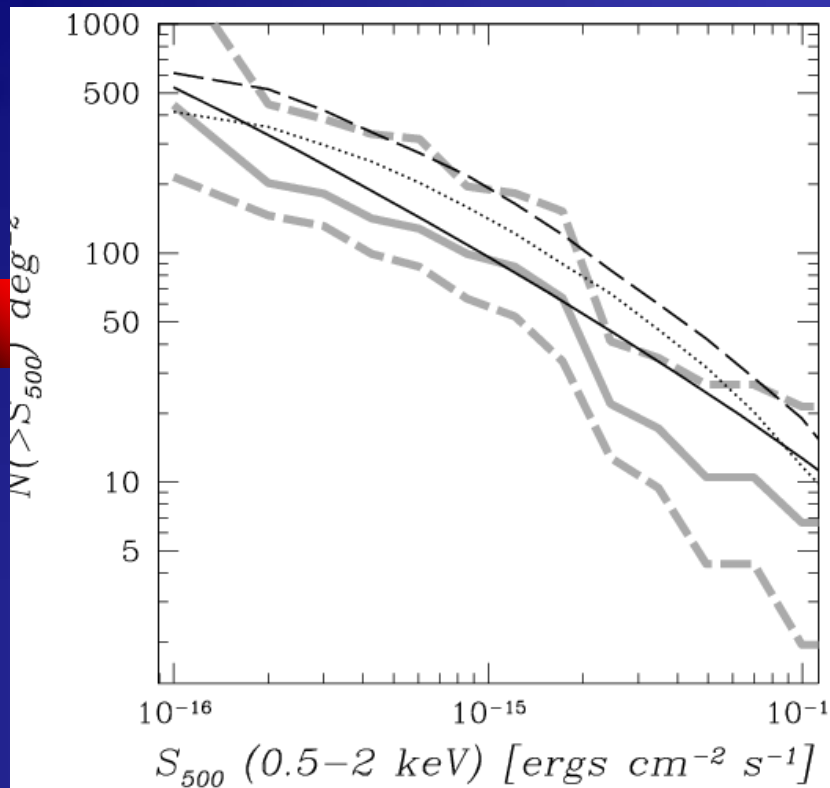


$$\lg M = 0.6 \lg L_x + C$$

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Ami Choi

CDFS: extended sources

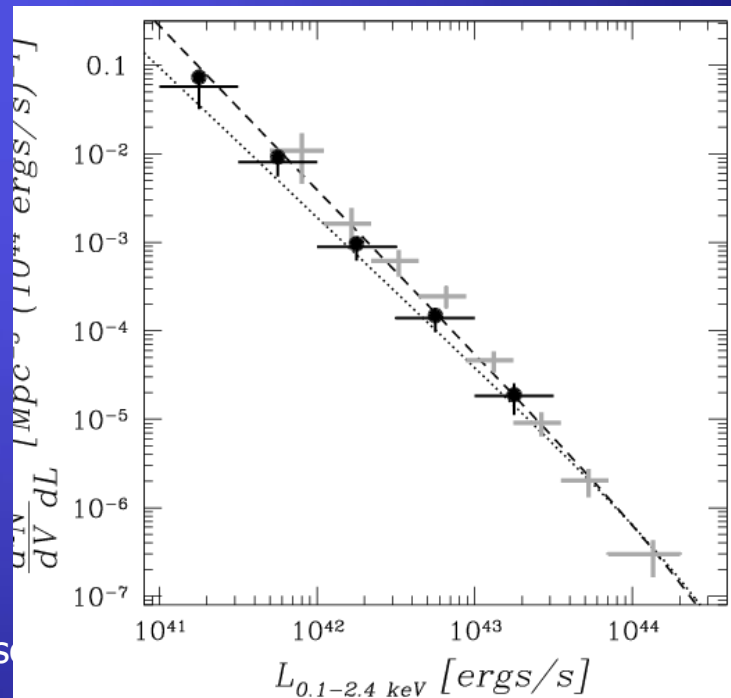


Groups vs LCDM

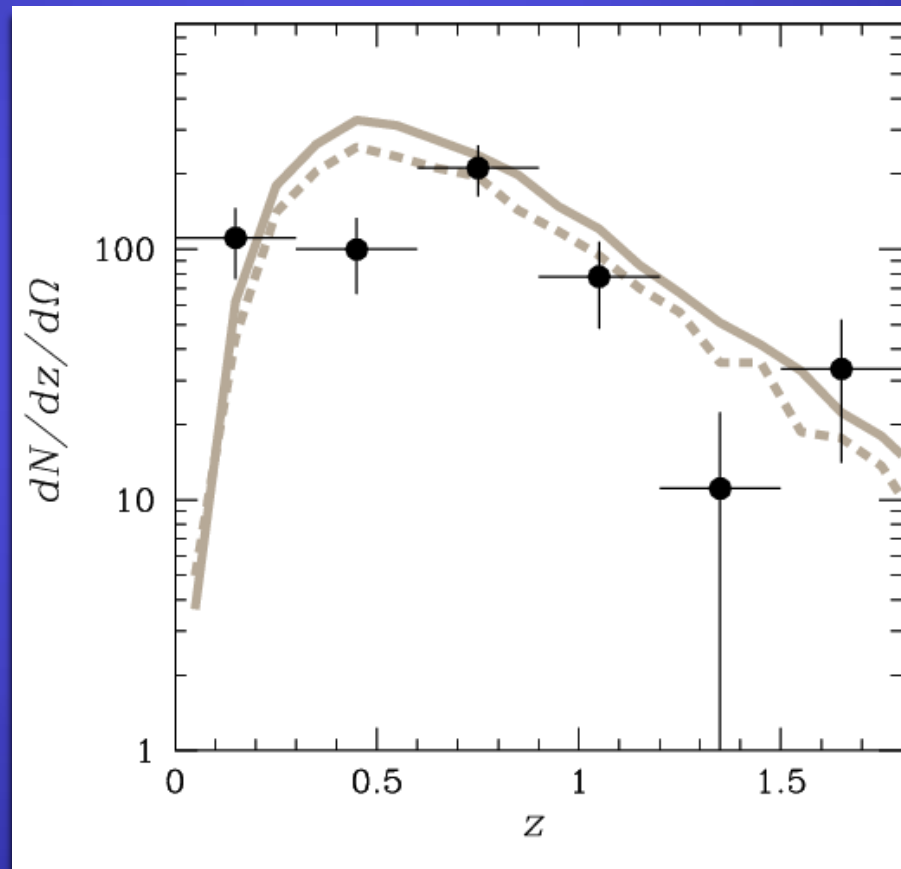
Finoguenov et al. 2010, 2014

Alexis Finoguenov

CDFS: extended s



dn/dz – the void is $0.3 < z < 0.6$





Conclusions

- ECDF-S delivered a very unique catalog of galaxy groups, probing interestingly low halo masses.
- We have compared the mass calibration with the weak lensing signal and the clustering, finding a good agreement
- Planck13 LCDM overpredicts the number of groups that should be visible in ECDF-S. This can be alleviated by ascribing 30% higher mass to each group.
- Finally, the known lack of structure in CDFS is contained to $0.2 < z < 0.6$ range.