

Measuring the Contribution of Low-Luminosity Sources to Cosmic Reionization with SINFONI

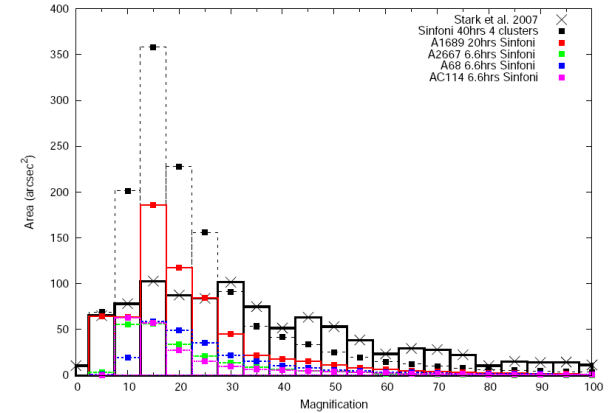
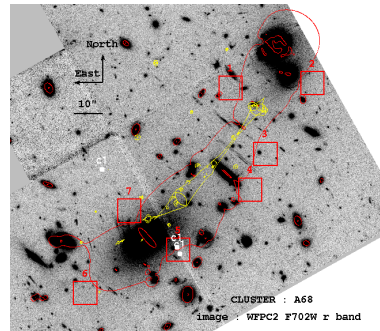
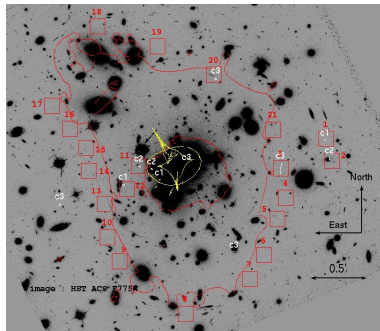
Benjamin Clément

Laboratoire d'Astrophysique de Marseille

collaborators : J-P.Kneib, N. Bouché, J. Richard, D. Stark, R. Ellis, C. Peroux, D. Lutz, N. Forster-Schreiber, E. Egami.

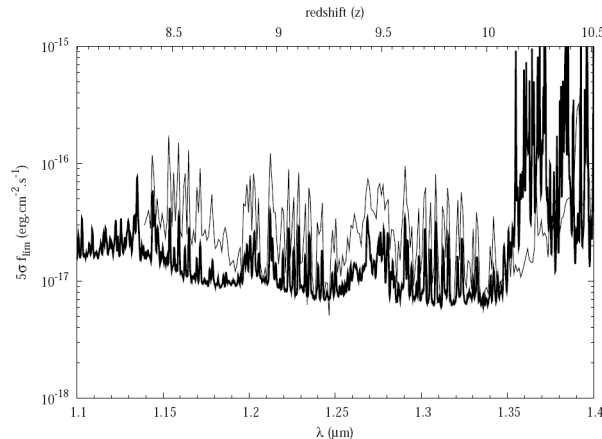
Search for LAEs behind massive lensing clusters

- $z \sim 8$ to $z \sim 10$
- 20hrs completed (P81) behind **Abell 1689** : 21 pointings
- data reduction finished, analysis has just begun



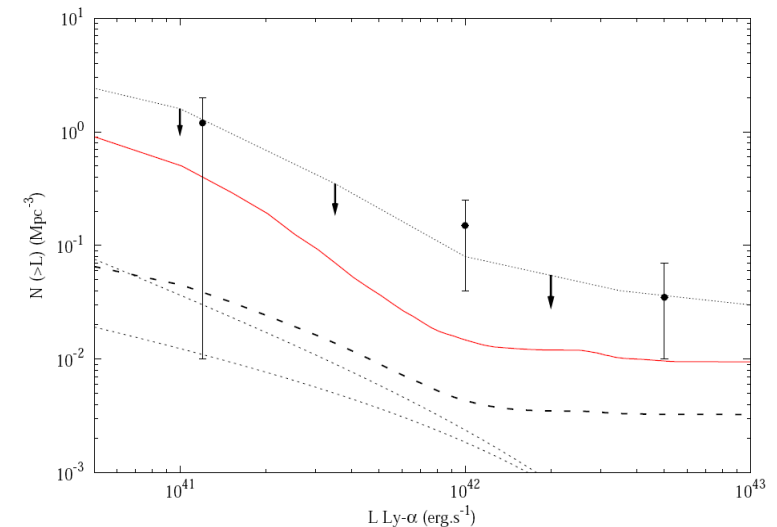
- magnification up to a factor x20-x30
- current area ~ 0.35 arcmin²**
- much wider than the previous Keck/NIRSPEC survey.

- 20hrs next semester behind Abell 28, Abell 2667, AC114.
- expecting 20hrs more in P83



5σ detection limit = 1E-17 erg/s/cm² in 1h

→ the complete survey (60hrs) will allow us to put constraints on the faint end of the LF with LAEs as faint as **$L \sim 5E41$ erg/s**



Unlensed sensitivity