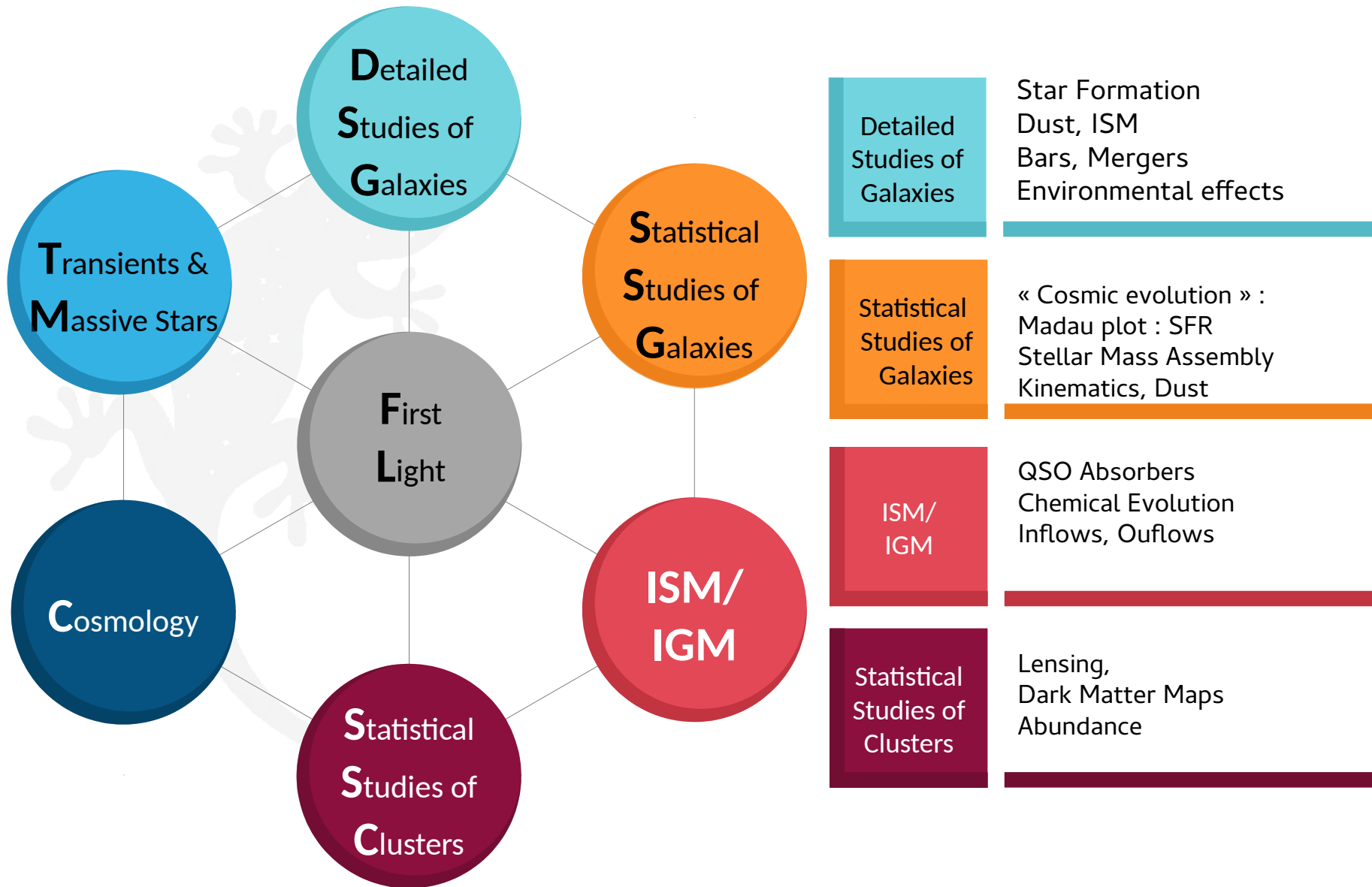


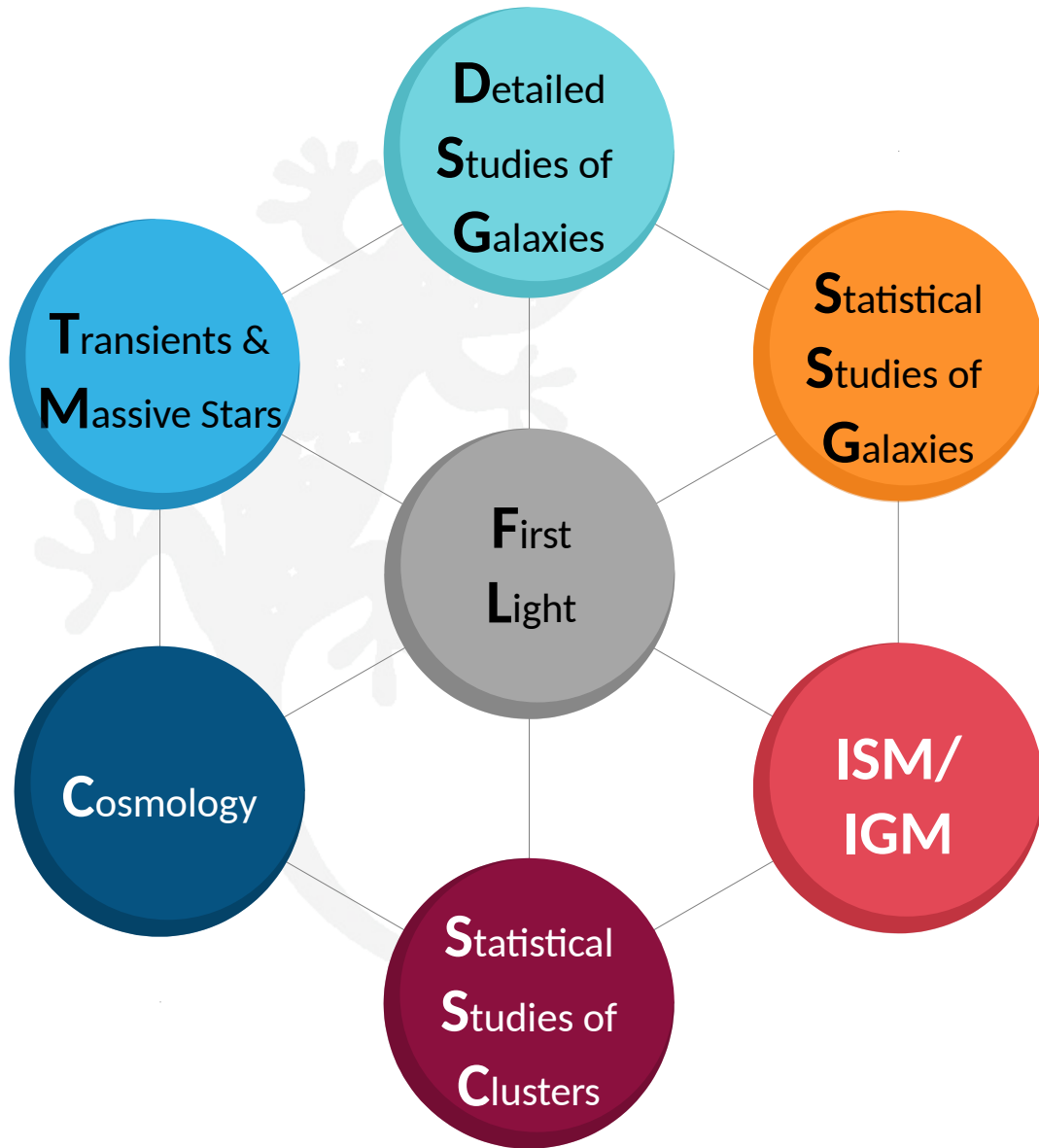
Galaxies, Étoiles et Cosmologie (GÉCO)

This presentation :

- is based on the «HCERES » document version circulated earlier. « Final » version mid-July for the University
- may be used in part for next CS, HCERES visit
- describes GECO activities and results
- introduces perspectives for GECO science

- Team formed on January 1st,
fusion of 5 previous teams
(MIS, Pdg, Cosmologie, PSEG, DynGal)
- 36 staff
- 19 PhD students
- 12 post-doctoral researchers.





Cosmology

Dark Matter Distribution & Nature
Dark Energy, & Cosmological model

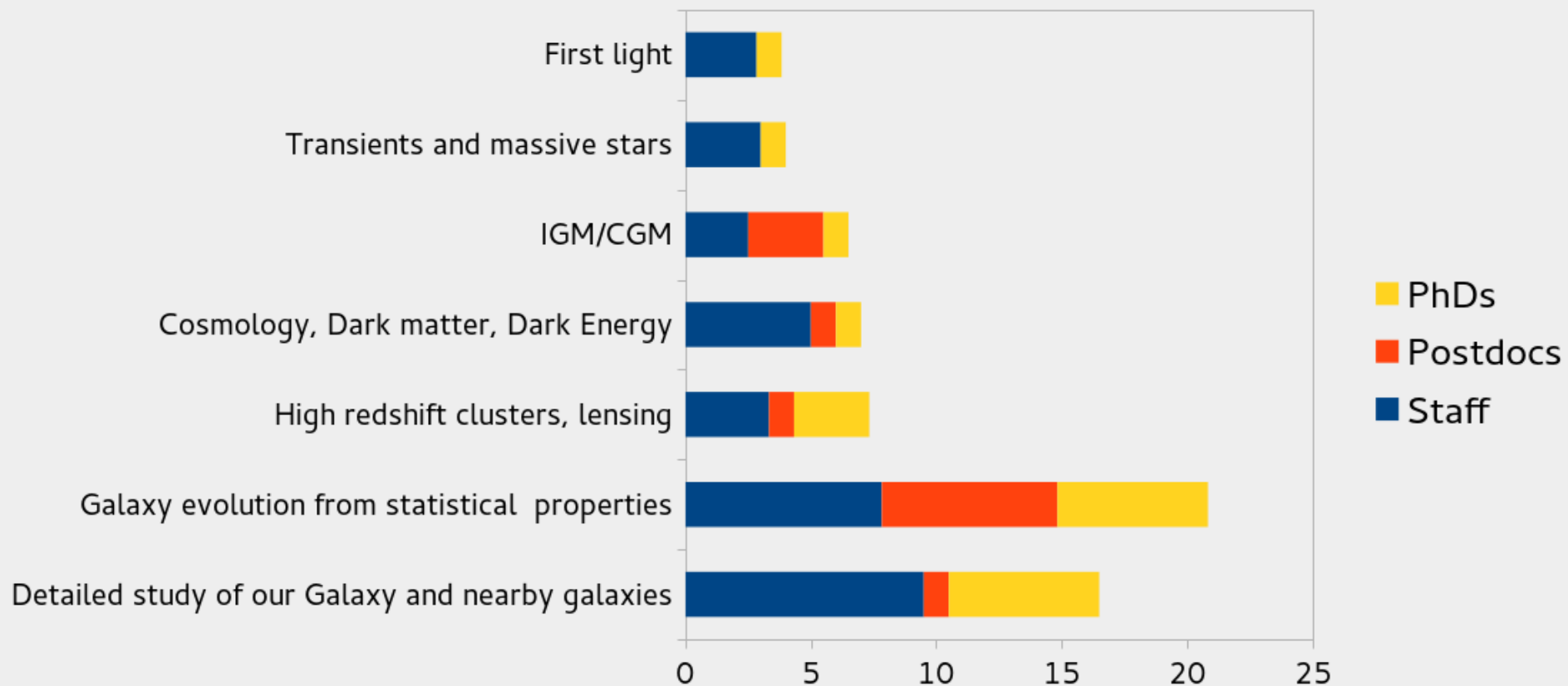
Transients & Massive stars

Observations of O stars and population III stars
SuperNovae models
Gamma Ray Bursts

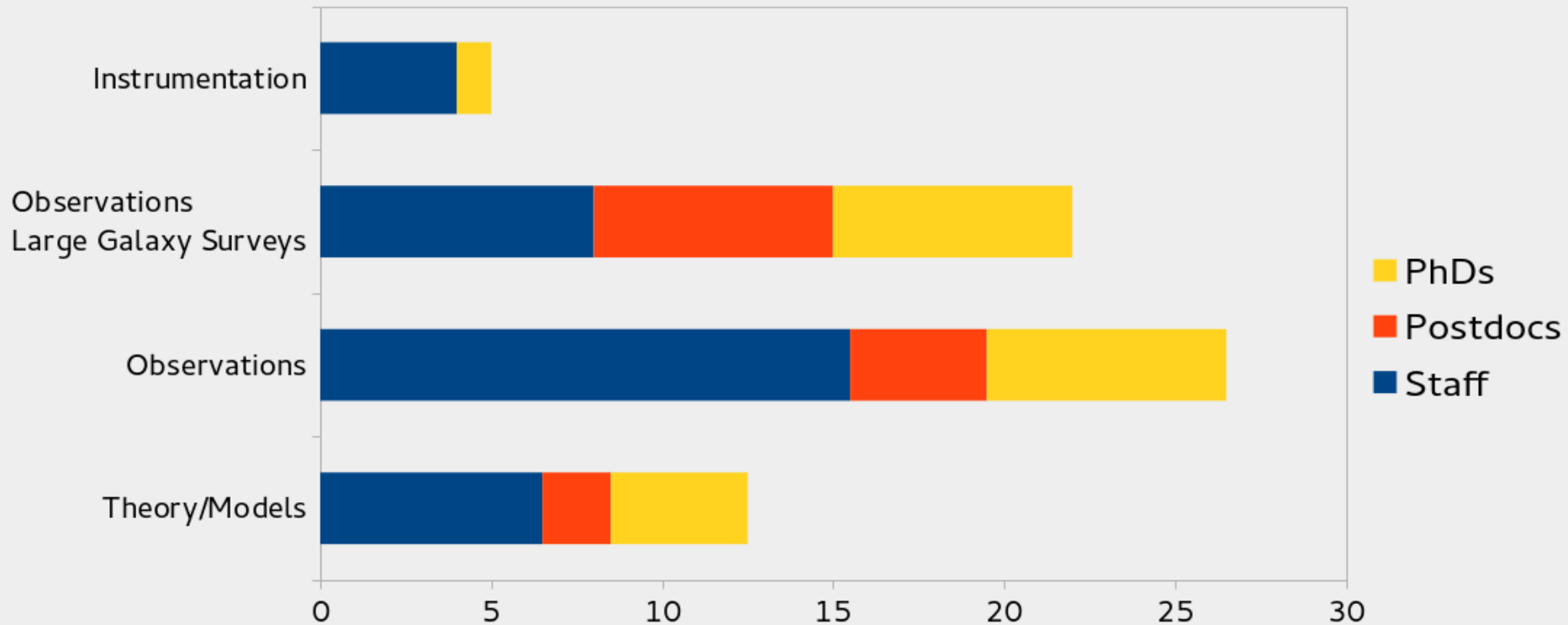
First Light

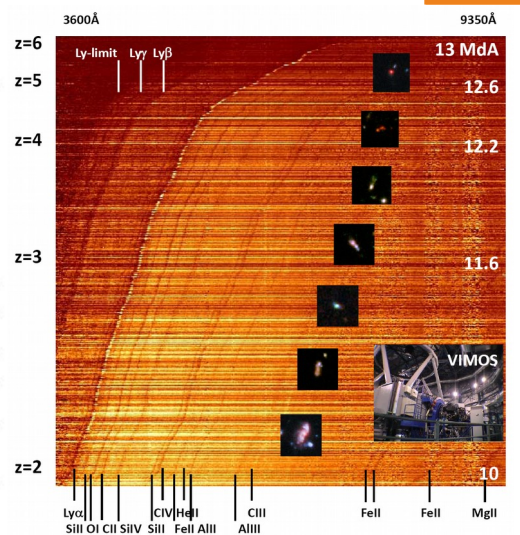
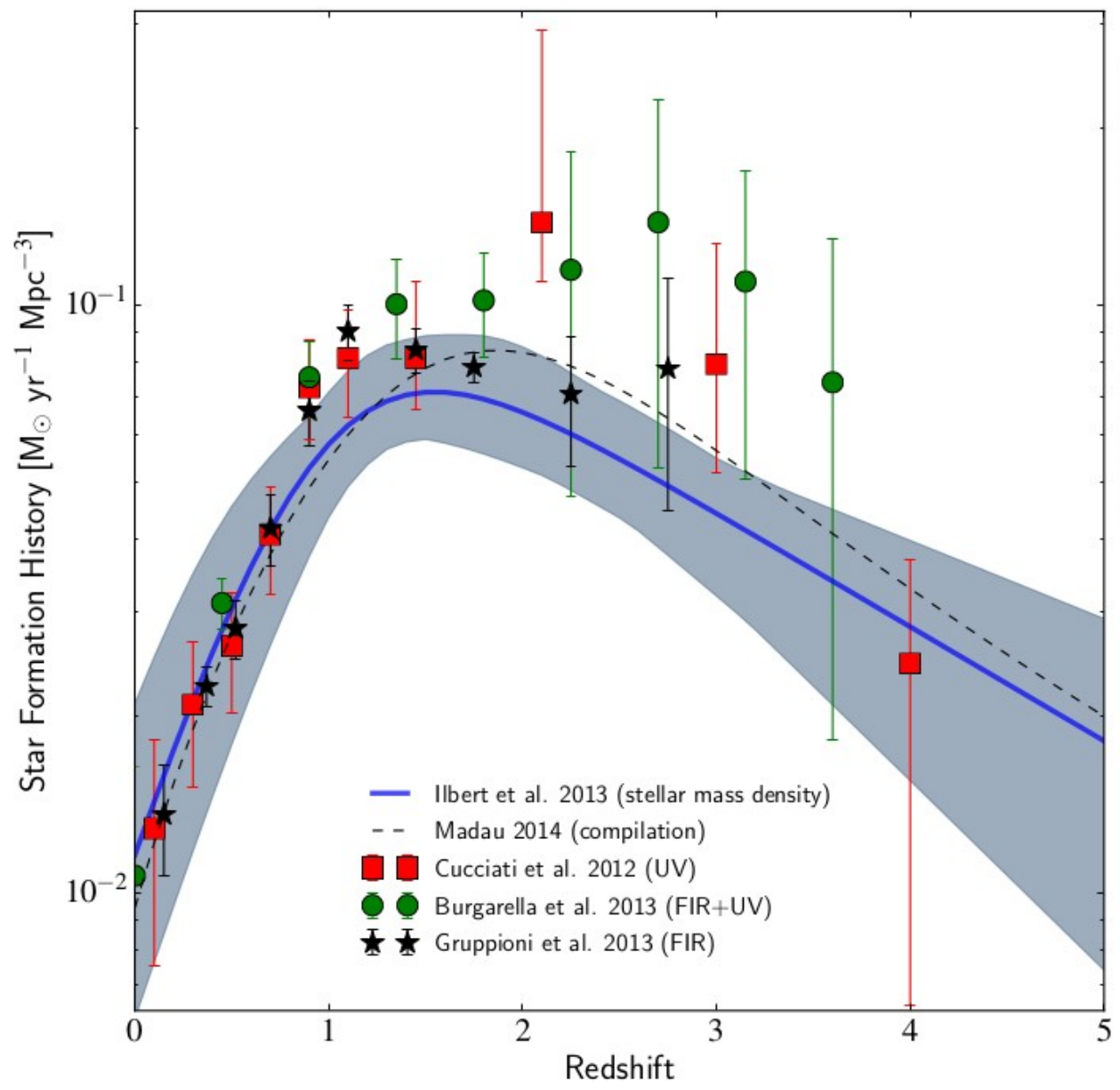
Search for very high z Galaxies (Narrow band, Deep surveys, Hosts of GRBs, Lensed)

- Ressource distribution on the different themes

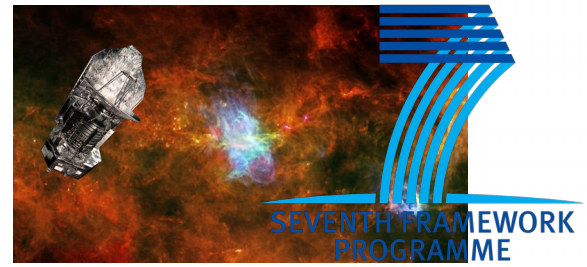


- Ressource distribution on the different themes
- And with different methodologies





VUDS
ERC EARLY



Herschel surveys
2 FP7 programs in the team

Perspective for GECO.

A) The continuation of ongoing efforts along themes in the road-maps of agencies:

1)

Cosmic First Light :

Highest redshift galaxies, first stars, population III, Gamma Ray Bursts. More generally link with Star formation.

2)

Cosmic Mapping :

How the large scale matter distribution (gas, galaxies, DM) relates to the cosmic history of galaxies

3)

Dark Sector:

Nature of Dark Matter, Dark Energy, and acceleration of the expansion. Cosmological model

Perspective for GECO.

B) Preparing your long-term future

0)

Transients :

SVOM, F-GFT, MISTRAL. LSST (subject to politics)

Not discussed further today

1)

Radio/Sub-mm/mm :

Legacy of Herschel, switching to ALMA and NOEMA

The future of SKA and related projects ?

2)

UV :

Large scientific/technical expertise and interest in the laboratory.
Long-term road-maps.

3)

X-ray:

Athena is selected. Interests in the team (cosmic mapping theme). Insertion in the technical activities of the laboratory ?