The evolution of high redshift massive galaxies in HUGS/CANDELS

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Abstract

I will present the latest results on the evolution of high redshift massive galaxies from CANDELS and HUGS. The latter, in particular, is the deepest survey ever conducted in the K band over areas of cosmological interest. Resulting from an ESO Large Program that used more tan 200 hours of exposure time with the IR images Hawk-I at the VLT, it delivers images of suber quality (*seeing* < 0.4) over two of the CANDELS field (UDS and GOODS-S/HUDF), reacing magnitude limits as faint as K=26.5-27. Merging this data set with the rest of the CANDELS dataset we have been able to investigate the evolution of massive galaxies at high redshift. In my talk I will focus in particular of two main results: - the evolution of the Galaxy Mass Function at $z > 4$, and its consistency with the evolution of the star-formation rate as a function of redshift;
- the number density and redshift evolution of passively evolving galaxies at $z > 2$.