

Public announcement of international meeting



INAF – OAR for the Astrodeep project



ASTRODEEP

"Unveiling the power of the deepest images of the Universe"

THEME [SPA.2012.2.1-01]

[Exploitation of space science and exploration data]

Grant agreement for: Collaborative project

Grant agreement no: 312725

ABSTRACT

In this document we present the public announcement of an international meeting dedicated to the topics covered by ASTRODEEP.

Deliverable Number D7.6 – Delivery date July 2015.

*Prepared by: A. Fontana, J. Dunlop, D.
Elbaz, H. Ferguson
Approved by: AEC
Date: 20/07/2015*

Goal

One of the main goals of the ASTRODEEP collaboration is to broaden the collaboration between scientists that are active in the exploitation of the deepest images of the Universe. In this context, focused scientific meetings are crucial in establishing connections, foster new ideas and spread latest results and achievements in the astronomical community. For this purpose, two major scientific conferences were foreseen: one expanded collaboration meeting, open to CANDELS and HERSCHEL teams, that took place in January 2015 and an international conference in Europe, scheduled to take place in January 2016.

The actual dates of both meetings have been delayed in comparison to the dates originally planned in the DoW in order to guarantee the optimal timing for an appropriate scientific discussion of the results, after proper analysis of the released data in mid-2014, and thus maximize the impact of the dissemination effort. According to the DoW, the announcement for the international meeting should have taken place by month 17 (May 2014) but the EC decided that it would be better to organize it during the last year of the project, since most of the scientific tools and catalogs will be ready for public distribution, by that time.

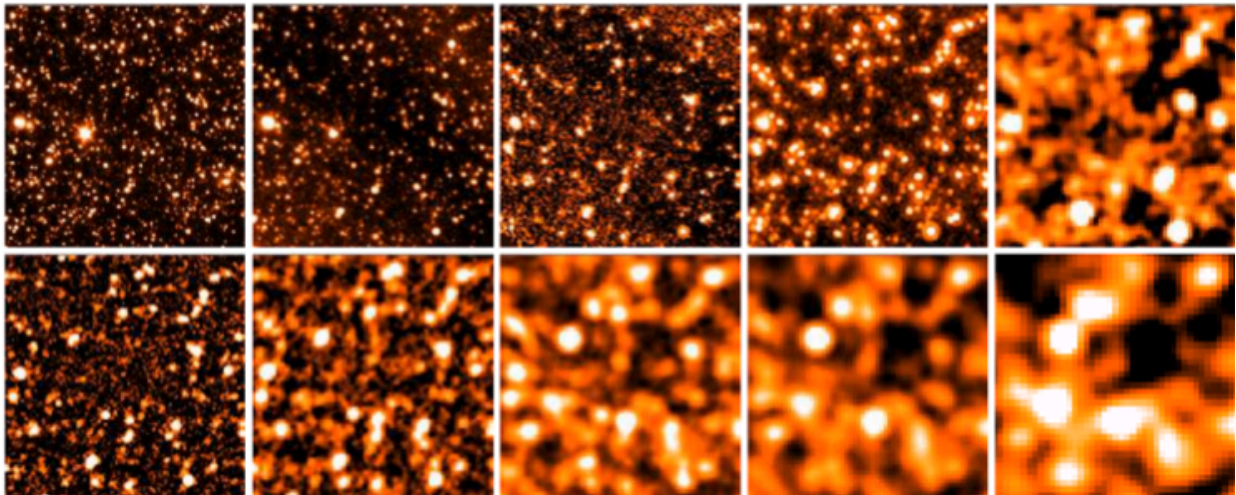
After the success of the collaboration meeting, the same facility, ***Sexted Centre for Astrophysics***, has already been booked for January 2016. Organizing the international meeting during the first month of the project's last year would give optimal visibility to both technical and scientific ASTRODEEP products and would leave the consortium the possibility to integrate community feedback in the final results, before the end of the project in December 2016.

The public announcement will become available on the official site of the conference centre:

<http://www.sexten-cfa.eu/en/conferences/2016>

and on the ASTRODEEP website:

<http://www.astrodeep.eu/category/events/>



AN ASTRODEEP SCIENCE MEETING

The early growth of galaxies:

The HST, Spitzer and Herschel joint legacy.

Sexten Center for Astrophysics

Sesto val Pusteria, Italy

January 11-15 2016

Aim of the workshop

This workshop is organized under the auspices of the ASTRODEEP project and is devoted to discuss the legacy of the Great Observatories (in orbit and on the ground) in the study of high redshift galaxies. We aim at bringing together members of the CANDELS and the GOODS-Herschel collaborations, as well as external scientists interested in the topics, to present their latest results and the perspectives for the next future.

Scientific rationale

In the last 15 years we have witnessed a true revolution in our capability of exploring the Universe up to the earliest ages and of understanding the physics of early galaxy evolution. These advantages have been made possible mainly by the latest generation of instruments and satellites. In particular, the three Great Observatories in space (HST, Spitzer and Herschel), coupled with Chandra and all major telescope from the ground, have delivered full panchromatic information large samples of galaxies at high redshift.

This large amount of complementary data allow us to understand the physical processes at play and

to observe them at different cosmic epochs, using sophisticated techniques to recover the rest-frame parameter of distant galaxies from their Spectral Energy Distribution .

Now that all the major satellites are either aging (as in the case of HST, Spitzer and Chandra) or have ceased their operations (like Herschel), time is ripe to discuss their legacy, summarizing their overall findings and the scientific challenges that are still to be solved.

This workshop aims at gathering experts from both the CANDELS and the GOODS-HERSCHEL teams to discuss the latest results and open problems in these fields.

Selected scientists from other teams will also be invited, in order to put the discussion in a broader context.

Topics

Topics to be covered are:

- Statistical properties of high redshift galaxies
- Rest frame properties of high redshift galaxies and AGN:
- The estimate of star formation and stellar masses at high redshift;
- The consistency (or lack of) in star formation rate and stellar mass assembly;
- Estimate of metallicity and its impact on the global properties;
- The evolution of dust and dust-to-gas content in high redshift galaxies
- Differentiating AGN and starburst galaxies at different wavelengths;
- Methods for optimal photometry over a large wavelength and spatial resolution range;
- Synthetic templates for SED fitting techniques;

Workshop location and format

The workshop attendance will be limited to about 40-50 scientists. The format allows ample time for presentations (all oral, no poster is foreseen) and for interactive work among the participants.

The workshop will be hosted by the Sexten Center for Astrophysics (SCfA), located in Sexten (Italy).

The main aim of SCfA is organising and hosting every year small and medium-size workshops and schools, in order to offer to scientists, working in the fields of Astrophysics, Cosmology and Physics, the opportunity to meet in an informal environment and to carry out collaborative work. It already hosted two CANDELS meeting in the last three years.

SOC:

- A. Fontana (Chair)
- A. Comastri
- J. Dunlop
- D. Elbaz
- H. Ferguson
- S. Faber