

Report on

# The ESO-ESA-IAU Conference Communicating Astronomy with the Public 2005

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Over one hundred astronomers, public information officers, planetarium specialists and image-processing gurus descended on ESO Garching in June for CAP 2005 – Communicating Astronomy with the Public 2005. This was the third international conference addressing astronomy outreach; the previous venues being La Palma and Washington DC. The main aim was to bring together the specialists from the various strands of astronomy undertaking outreach in the broadest sense. The four-day conference was a resounding success, much was achieved and the work of ESO was better appreciated (especially from the non-European perspective) through a tour of the facility. Some of the highlights of the local environs were much enjoyed through the conference dinner at the Deutsche Museum's aviation museum "Flugwerft Schleißheim" – (including cockpit tours of an F4 Phantom) and a splendid (and well liquid refreshed) evening at the Augustinerkeller, one of the largest Munich Biergartens.

The previous meeting in Washington was run along a workshop format focussed on specific outcomes out of which arose: the setting up of a Commission-wide Working Group of the IAU; the production of the Washington Charter (see [http://www.communicatingastronomy.org/washington\\_charter](http://www.communicatingastronomy.org/washington_charter)); and the formulation of the first principles of an image repository (in the widest sense). The format of that meeting included breakout session to debate these issues. CAP 2005 sought to build on these foundations and move all issues forward, and as such had a number of plenary sessions followed each day by three workshops devoted to four specific topics.

There were a number of key themes for the meeting covered in the plenary sessions. Each session was led-off by invited speakers and one of the main highlights of the meeting was the extremely



The "Credibility discussion" at the conference.

high level of both content and presentational style by all the speakers. The sessions were: 1. Setting the Scene, 2. The TV Broadcast Media, 3. What Makes a Good News Story?, 4. The Role of the Observatories, 5. Innovations, 6. The Role of Planetaria, 7. Challenges and New Ideas, 8. Keeping our Credibility – Release of News, 9. The Education Arena, 10. Astronomical Images – Beauty Is in the Eye of the Beholder, 11. Cutting-edge Audiovisuals, 12. Virtual Repositories

A most successful discussion on credibility and the general theme of communication ethics took place in the session "Keeping our Credibility", where we were delighted to field a star-studded panel, including the ESO Director General, Catherine Cesarsky.

Technology and the power of the web was much to the fore throughout the conference. The PowerPoint presentations were all posted online on the conference website on the same day as the talk took place.

The live Web casts that were transmitted from the conference were clearly a success as a number of speakers received e-mails while at the conference commenting on aspects of their talk or responding

to invitations for information. Web casts on the other hand promote a somewhat less intimate form of talk, as the audience in principle goes far beyond those in the auditorium. When some of the speakers occasionally clearly forgot this, it promoted some hasty interjections of the words "Web cast, Web cast" from the front row to much amusement from the audience. The Web casts were also posted online daily during the conference and have helped participants afterwards with the preparation of their proceedings papers.

The "Hands-on" workshop sessions running in parallel in the afternoons were a huge success and a number were oversubscribed. This had been anticipated in the planning and so the more popular ones were repeated on subsequent days. The workshops were woven around the themes of: image processing; interactions with the media; a communicating toolkit.

Zolt Levay (STScI) and Lars Lindberg Christensen (ESA/Hubble) presented two workshops on basic image processing, from image acquisition through import with the FITS Liberator to the task of handling multiple layers within Photoshop. Hubble images were used as the testbed, so that the participants could

Photo: L. H. Nielsen, ESA/Hubble

experiment and see the changes to the final image product through different techniques within Photoshop.

Lisa Frattare and Robert Hurt extended this theme with two workshops on more advanced image processing 'tips & tricks' for how to clean and correct the colour images as well as make a better composition. Greg Bacon (NASA/STScI) presented a session on how to undertake simple animation studies. Finally in this theme, Martin Kornmesser and Lars Lindberg Christensen hosted a session devoted to producing your own DVD. Govert Schilling gave two sessions devoted to how to write for the media and an interactive discussion on the rights and wrongs of producing a good press release. Terry Mahoney gave an overview of the basic contents of a toolkit for astronomers involved in outreach and the do's and don'ts of a successful programme. There is no doubt that this focused skills-based workshop-style was extremely beneficial and well appreciated by the attendees.

The conference summing-up was undertaken by Professor Paul Murdin (Cambridge) who brought together the various themes, tensions and links and additional-

One of the "Hands-on Workshops" at the conference.



ly suggested a possible theme for the next conference, which will be in 2007.

The meeting was organised by Ian Robson and Lars Lindberg Christensen supported by Scientific and Local Organising Committees. The work of the 'FITS Liberator' team was enormous in making the conference both successful and right up to the minute in terms of technology.

So all those interested in outreach should go to the IAU Working Group web-page: <http://www.communicatingastronomy.org> and enrol on the "Supporters" sign-up sheet so that we can keep you informed of progress and future events. The proceedings of this conference are currently being edited and are planned for publication in September.

The organisers wish to acknowledge financial and infrastructure support from ESO, as well as support from ESA and the IAU.



Photos: L. H. Nielsen, ESA/Hubble (2)

Social event: Visit to one of Munich's many Biergartens.

Report on the ESO Workshop on

## Virtual Observatory Standards and Systems for Data Centres and Large Projects

Paolo Padovani, Markus Dolensky (ESO)

The Virtual Observatory (VO) is an innovative, evolving system, which will allow users to interrogate multiple data centres in a seamless and transparent way, to best utilise astronomical data. New science will be enabled, moving astronomy beyond "classical" identification by allowing the characterisation of the properties of very faint sources by using all the available information. The VO requires good communication, that is the adop-

tion of common standards between data providers, tool users, and developers. These are being defined using new international standards for data access and mining protocols under the auspices of the International Virtual Observatory Alliance (IVOA: <http://ivoa.net>), a global collaboration of the world's astronomical communities. At the European level, in addition to seven national VO projects, the European Community funded collaborative EURO-VO is the successor of the Astrophysical Virtual Observatory (AVO: e.g., Padovani et al. 2004, The Messen-



ger 117, 58) and the logical next step from AVO as a deployment of an operational VO in Europe (more on EURO-VO in a future issue of The Messenger).

Data centres lie at the foundation of the VO, as obviously access to astronomical data at all wavelengths is a key requirement. The VO cannot (and does not) dictate how a data centre handles its own archive. All that is needed is a VO-layer