



video clips from Paranal, the CD-ROM also contains spectacular 3D images of astronomical objects, thanks to a unique rendering software developed by Planetary Visions.

The CD-ROM will initially be available in English and German, with a French version under preparation.

On the background of the status of post-World War II astronomy in Europe, the video *Europe Reaches for the Stars – Forty Years ESO* traces the evolution of ESO, from the humble beginnings until today – with the VLT in full scientific operation and VLTI in the development stage – and projects the current successes into the future.

The 50-minute film includes rich historic footage not shown before and interviews with the past directors general. Scientific highlights are exposed, both in the context of the general development of Astronomy and the research activities at ESO.

The film is produced by ESO's EPR department and will initially be available with English narration.

Finally, a planetarium show with the title *Les mystères du ciel austral* has been developed in collaboration with APLF, the association of French-language planetaria and with the help of its sister association in the German-speaking countries (ADP). Prof. Agnès Acker from the Louis Pasteur University of Strasbourg and Marc Moutin, head of the planetarium at the Cité de l'Espace in Toulouse, have been the driving forces behind the project, with the technical preparation of the show being executed by Master Image Group of France.

This show, which focuses strongly on the VLT and the recent scientific results, is initially produced in two versions, customized for France and Germany, and other language versions may be produced.

ing description of the early search for sites by the German astronomer Jürgen Stock, whose work played a key role as the ESO Council took its initial decision about where to locate the observatory.

Dirk Lorenzen is also the author of the CD-ROM entitled *3D Atlas of the Universe*, which is produced in a collaboration between ESO, USM (Munich) and Planetary Visions (University College, London). Apart from audio and

First Teachers Training Course at ESO HQ was a Great Success

A. BACHER, R.M. WEST, ESO

On August 20–24, 2002, School Teachers from a dozen different European countries (including eastern countries) came to ESO HQ to learn about recent developments at ESO. The training course called FAST2002 (Frontline Astrophysics for School Teachers) consisted of several lectures and workshops.

The lectures were given by ESO astronomers and dealt with ESO in general, VLTI, OWL, and Science at ESO.

During the first three workshops, the

teachers went through three of the four ESA/ESO Astronomy Exercise Series (see *The Messenger* No. 107, March 2002), trying out different methods of determining astronomical distances.

The fourth, major workshop aimed at creating new exercises. Two different topics were discussed in great detail. One was to determine properties of a Transneptunian Object using six different images, kindly provided by Olivier Hainaut (ESO La Silla).

The other topic was about Extrasolar

Planets. Results taken at the Leonhard Euler Swiss Telescope at La Silla by the group of Michel Mayor were elaborated in ways that students of different ages can understand. This included the determination of planetary parameters and how to judge if life would be possible on the planet (concept of "habitable zone").

In addition there was a poster session, where the participants presented projects about their own educational work.

Veselka Radeva from Bulgaria made the following statement, when she was asked about her impression of this course: "Excellent organization, wonderful presentation of the observational possibilities of ESO, excellent work on the existing exercises and efficient creative work for the invention of new exercises by an excellent group of teachers. Thank you very much!"

After this good start, the ESO Educational Office now looks forward to organizing more teacher training courses in the next years.



Participants in front of the ESO Headquarters building in Garching. Photo taken by Gian Nicola Cabizza.

ANNOUNCEMENTS

STRUCTURE EVOLUTION AND COSMOLOGY:

New synergy between ground-based observations, space observations and theory

An international workshop to be held at ESO/Santiago, Chile, on October 28–31, 2002

Sponsoring Organizations:

European Southern Observatory (ESO); Centre National d'Etudes Spatiales (CNES); Commissariat à l'Energie Atomique CEA; DAPNIA/Service d'Astrophysique (SAP)

Scientific Rationale:

With the upcoming of the new generation of powerful wide-field instruments (XMM, Megacam, VIRMOS, Integral, SIRTF, GALEX, VLA, Omegacam/VST, VISTA...), the first decade of the XXIst century is to open a decisive era in the study of large-scale structure formation.

These observational developments are being complemented by considerable numerical and semi-analytical advances. The workshop aims to bring together groups closely involved in carrying out and coordinating ground-based and space surveys with efforts made in modeling the formation of structures. An important point will be the optimization of observing strategies and science returns in the context of the forthcoming Virtual Observatory. First results from various on-going programmes will be presented. Attendance by young researchers (students and postdocs) is most welcome. In this respect, a half-day cosmology introductory session will be given.

Scientific Organizing Committee:

M. Birkinshaw (Bristol), R. Ellis (Caltech), M. Kamionkowski (Caltech), C. Lonsdale (Caltech/IPAC), M. Pierre (CEA), A. Refregier (Cambridge), J. Silk (Oxford), S. White (MPA).

Local Organizing Committee:

D. Alloin (ESO), R. Cabanac (ESO), H. Quintana (PUC), J. Willis (PUC).

More details are available at: <http://www.eso.org/cosmology2002>

STELLAR CANDLES FOR THE EXTRAGALACTIC DISTANCE SCALE

An international Workshop to be held at the Universidad de Concepción, Chile, on December 9–11, 2002

Sponsoring Organizations:

CONICYT/FONDAP Institute for Astrophysics, Chile; European Southern Observatory; Fundación Andes; Universidad de Concepción, Chile

Organizing Committee:

D. Alloin, ESO (Co-chair); P. Fouqué, Paris; D. Geisler, Concepción; W. Gieren, Concepción (Co-chair); G. Pietrzynski, Concepción; T. Richtler, Concepción

Rationale of the workshop:

The past decade has seen a huge effort to improve the calibration of the extragalactic distance scale. Stellar methods of distance determination are used to measure the distances to nearby galaxies, setting the zero point of the extragalactic distance scale. Yet, comparison of the results from a variety of stellar standard candles shows that there are significant systematic uncertainties attached to most, if not all stellar methods of distance measurement, preventing a truly accurate calibration of the distance scale. This workshop will bring together leading experts on the most prominent stellar standard candles including Cepheid variables, RR Lyrae stars, Type Ia supernovae, blue supergiants, planetary nebulae, novae and globular clusters to explore their current usefulness for the calibration of the distance scale, and for putting constraints on the Hubble constant as a fundamental cosmological parameter. Special attention will be given to improve our understanding of systematic uncertainties in the various methods of distance measurement, and in designing strategies to reduce these uncertainties in the near future.

More details can be found at: workshop@coma.cfm.udec.cl
<http://cluster.cfm.udec.cl>