

Exploring the Cold Universe – A Planetarium Show for the IYA 2009

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A planetarium show highlighting the ALMA project is being jointly prepared by ESO and the *Association des Planétariums de Langue Française*.

As part of a wide range of education and public outreach activities for the International Year of Astronomy 2009 (IYA 2009), ESO is collaborating with the *Association des Planétariums de Langue Française* (APLF, the association of French-speaking planetaria) and other partners in Europe to produce a new 30-minute long planetarium show centred on the ALMA project.

This show builds on the experience already gained by the APLF to produce unique planetarium shows at the European level. The APFL, born in 1984 but officially created in 1989, coordinates the operations of about 50 French planetaria

with a total annual visitorship of about 1.3 million. As member of the International Planetarium Society, the APLF has also established close links with planetaria from many other countries.

In 2001, the APLF, in collaboration with the French space agency CNES, produced a show about the Earth seen from space. In 2002, in collaboration with ESO, a very successful show was produced for the 40th anniversary of ESO, entitled “Mysteries of the Southern Sky”, celebrating the performance of the VLT. In both cases, the shows were presented in around 40 planetaria in France, Germany, Belgium, Italy, and Spain and other countries.

About 30 planetaria in several countries have already agreed to present the new show which will be available for viewing from autumn 2008 – in order to be included in school programmes – and officially inaugurated early in 2009. It is a unique chance for planetaria to be directly involved with the IYA 2009.

A fruitful collaboration

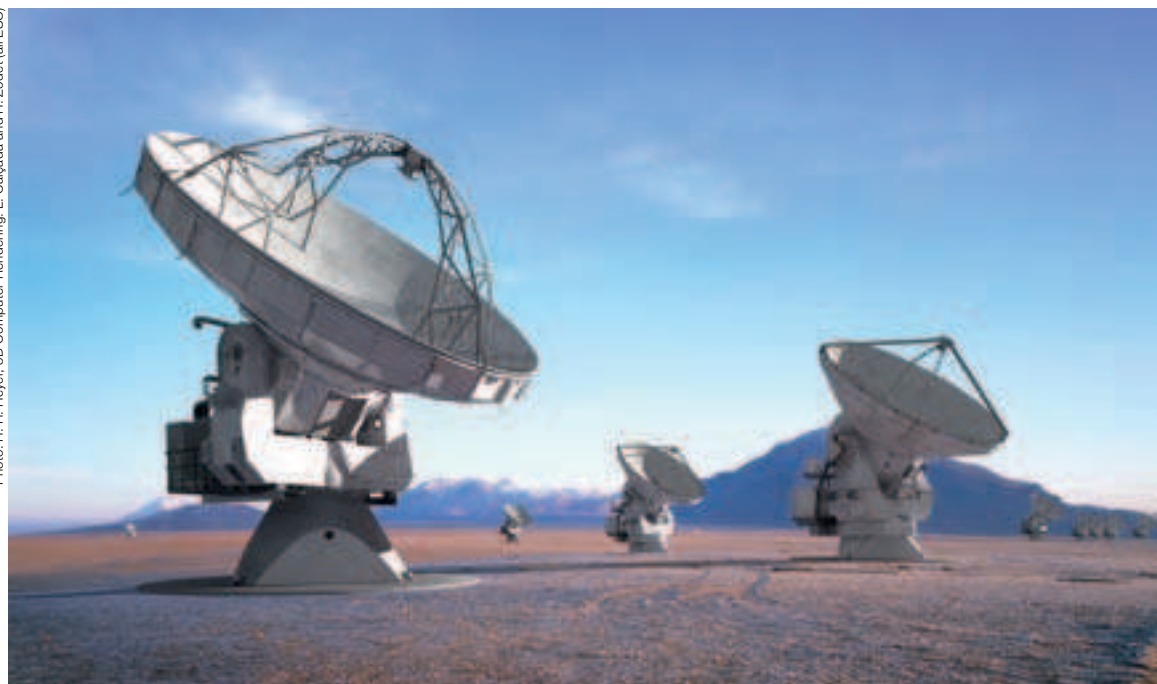
The emphasis of the new planetarium show is the incomparable scientific en-

deavour that the ALMA project represents. The unique setting of ALMA in the Atacama Desert at an altitude of 5 000 m is also emphasised, as well as the difficulty of building something in such a remote, inhospitable place. An astronomer will act as the primary guide through the show. The aim is to have a spectacle that is attractive to all members of the public, from young to old.

ESO provides the scientific expertise, validates the story-board, supplies images, computer simulations and videos, and financially supports the project. ESO will also produce a Chilean version and help provide associated documents for visitors. The APLF will make the story-board, produce the show in five languages, and is responsible for the promotion, duplication and distribution both in France and in Europe.

The show shall be available in three different formats: full dome video; All-Sky projection and video windows; image projection and video windows for smaller planetaria. It will be available to all planetaria worldwide for a very small fee, dependent on the type of planetarium, to cover basic costs.

Photo: H. H. Heyer, 3D Computer Rendering; L. Calçada and H. Zodet (all ESO)



Left: A photograph of the Chajnantor plateau with superposed 3D computer rendering of some ALMA antennas as they might appear when ALMA is operational.

Right: A view towards the VLT and the summit of Cerro Paranal with the VISTA dome in the foreground.