



2nd May 2013 - 04:00 p.m.
Building 99, seminar room IV

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ESO – 50 years of serving European Astronomy

ESO, the European Southern Observatory, is the foremost intergovernmental astronomy organisation in Europe and the world's most productive astronomical observatory. ESO provides state-of-the-art research facilities to astronomers and is supported by Austria, Belgium, Brazil*, the Czech Republic, Denmark, Finland, France, Germany, Italy, the Netherlands, Portugal, Spain, Sweden, Switzerland and the United Kingdom. Whilst the Headquarters (comprising the scientific, technical and administrative centre of the organisation) are located in Garching near Munich, Germany, ESO operates, in addition to the Santiago Centre, three unique observing sites in Chile: La Silla, Paranal and Chajnantor.

ESO's main mission, laid down in the 1962 Convention, is to provide state-of-the-art research facilities to astronomers and astrophysicists, allowing them to conduct front-line science in the best conditions. In 2012 and 2013 respectively, ESO is celebrating its 50th anniversary and 50 years of presence in Chile. I will provide a short overview over ESO's history and facilities, and present scientific highlights. Also I will describe in some detail two aspects of astronomical operations at ESO: high-resolution spectroscopy, the most successful approach to detecting extra-solar planets and service mode observing that takes into account atmospheric conditions in order to optimize the quality and efficiency of astronomical observations. I will conclude with a presentation of future plans in particular the European Extremely Large Telescope (E-ELT).

*Brazil is in the process of ratifying its membership in parliament.



In the foreground Paranal Observatory, located at an altitude of 2,600 met on mount Paranal in Chile close to the Pacific Coast. In the background we can see the snow-capped,