ALMA and ELTs: A Deeper, Finer View of the Universe

24–27 March 2009, ESO Headquarters, Garching, Germany

The next two decades of ground-based astronomy will be dominated by the Atacama Large Millimetre/submillimetre Array (ALMA) and the advent of giant optical/ near-infrared telescopes: the Giant Magellan Telescope (GMT); the US Thirty Meter Telescope (TMT); and the European Extremely Large Telescope (E-ELT).

The main goal of the workshop is to bring together the ALMA and ELT communities, to identify the common science cases and to outline instrumentation/upgrade priorities for the ALMA and ELT facilities in order to support these programmes.

The product of the workshop will be a report (rather than proceedings). The report will, on the one hand, present the common science cases in the areas of:

- fundamental physics, cosmology, and relics of the early Universe;
- galaxy and ISM evolution;
- star formation from re-ionisation to the present;
- Solar Systems near and far.

On the other hand, the report will identify upgrade paths for ALMA and instrument priorities for the ELTs. The conclusions will be used as feedback to the ALMA science group investigating science with ALMA in the 2020 era, and to the instrumentation plans of the various ELTs.

The workshop is jointly organised with representatives of all ALMA partners and ELT projects. Thus, we believe that the workshop will become an international milestone for all projects concerned.

Science Advisory Committee: Jose Afonso (Observatorio Astronomico de Lisboa/ALMA), Andrew Blain (Caltech/ ALMA), Roberto Gilmozzi (ESO/E-ELT), Richard Hills (ESO/ALMA), Rolf Kudritzki (Institute for Astronomy, University of Hawaii/Giant Segmented Mirror Telescope (GSMT)), Patrick McCarthy (Carnegie Observatories/GMT), Koh-Ichiro Morita (National Radio Astronomy Observatory (NRAO)/ALMA), Stephen A. Shectman (Carnegie Observatories/ GMT), David Silva (National Optical Astronomy Observatory (NOAO)/GSMT), Chuck Steidel (Caltech/TMT), Al Wootten (NRAO/ALMA).

Local Organising Committee: Annalisa Calamida, Markus Kissler-Patig, Christina Stoffer, Leonardo Testi.

The deadline for registration is 15 December 2008.

More information can be found at *http://www.eso.org/almaelt2009*.



One of the two ALMA transporters (Lore) is shown being used to move one of the Vertex antennas from inside the assembly building to an outside pad within the contractor area at the Operations Support Facility (OSF). This photograph was taken in June 2008. The Vertex antenna is currently undergoing pre-acceptance tests.