Contract Signature for 4MOST

Tim de Zeeuw 23 August 2016

Minister Wanka, Minister Muench, Frau Dr. Prasse, Professor Steinmetz, Herr Winker, Dr. de Jong (Beste Roelof), distinguished colleagues,

It is a pleasure to visit the AIP once again for an important milestone.

ESO's mission is to build and operate world-class observing facilities to enable astronomical discoveries by scientists in the Member States. The flagship facilities are the Very Large Telescope system on Paranal (which include the Interferometer and the two survey telescopes), the transformational ALMA radio telescope on Chajnantor, and, soon, the 39-metre Extremely Large Telescope on Armazones, close to Paranal.

Instruments for ESO's telescopes are built in close collaboration with consortia of technical and scientific institutes in the Member States. ESO procures the hardware and the institutions provide the labour effort. This additional contribution by the Consortium (i.e., by local funding agencies or Ministries) is compensated by a block of guaranteed observing time with the instrument. In this way the team that built the instrument knows it will have to opportunity to use it for the science they are interested in, and ESO can make the instrument available to anyone in the Member States, so that everyone benefits.

AIP is a key partner in the network of institutions that works with ESO. It had an important role in the MUSE integral-field spectrograph, which started operations on the VLT two years ago and almost immediately became one of the top-requested instruments. AIP provided the calibration unit and the data reduction software as well as support to ESO for the detector vessel performance and verification tests. The 39-metre Extremely Large Telescope will see first light in 2024. AIP is involved in early work for two of the planned instruments.

AIP leads the Consortium of institutes in six countries that won the competition for the construction of a wide-field spectroscopic instrument for a 4-metre class telescope. This is, of course, 4MOST. As we will hear in a moment from the P.I. Roelof de Jong, 4MOST is a monster multi-object spectrograph for the VISTA telescope on Paranal. Using fibres, it can observe 1600 and perhaps as many as 2400 objects at the same time. This will provide key data to complement observations with ESA's GAIA and EUCLID satellites and with the German/Russian eROSITA mission. An excellent example of how our science progresses through close cooperation between ground- and space-based observations.

In addition to the giant jump in capabilities for all-sky spectroscopic surveys, the 4MOST model of cooperation with ESO is also breaking new ground, in two ways. The guaranteed time is not in a block at the beginning of operations, but instead the Consortium can use two-thirds of the fibres in any observing block for their public survey programme. In addition, the Consortium will support operations of 4MOST with personnel effort, again in return for additional guaranteed time (i.e., more fibres). This further strengthens the partnership between the community and ESO.

The 4MOST project is a key step for science and scientific collaboration. The contract we are signing today is the result of substantial preparatory work to define everything properly. It is a pleasure to acknowledge the efforts of the 4MOST team, and, from ESO, by Vincenzo Mainieri, Jeff Pirard and Alessandro Martis, who is present. The three of them will be your primary contacts in the years to come. It will be an exciting project!