ALMA, the Atacama Large Millimeter/submillimeter Array, is expected to be the leading observatory at millimetre and submillimetre wavelengths over the coming decades. It is the result of a global collaboration involving Europe, North America, East Asia and the host country Chile. When complete, it will comprise at least 66 high precision antennas equipped with receiver and digital electronics systems to observe in the frequency range from 30 GHz to 1 THz and achieve angular resolutions as high as 5 milliarcseconds. Dynamic scheduling and innovative calibration strategies will ensure the most efficient use of the unique atmospheric qualities encountered at the 5000-metre high site on the Chajnantor plateau in the northern Andes.

While Full Science Operations are estimated to begin in 2013, the increasing capabilities of the growing array will become available to the astronomical community following the start of Early Science Operations in the second half of 2011. During the first phase of Early Science, an array of 16 antennas will be offered for interferometry with four frequency bands and a limited range of baselines. Early Science observations are currently estimated to be scheduled for at most one third of the available time, the remainder being reserved for continuing commissioning and science verification activities.

Scientific users will interact with the ALMA facility through their local ALMA Regional Centre (ARC), which will provide user support on all aspects related to observing with ALMA and assist observer teams throughout the lifecycle of their project. The European ALMA community is supported by a network of regional ARC nodes that are coordinated by the central European ARC hosted at ESO Headquarters in Garching, Germany.

With the ALMA Community Days, the ESO ARC aims to prepare the European astronomical community for ALMA Early Science operations. The first day will be dedicated to a series of scientific and technical presentations related to ALMA and Early Science capabilities, while the second day will be taken up by interactive tutorials on the preparation of ALMA observing proposals using the ALMA Observing Tool (OT). This should help novice and advanced ALMA users alike to create observing projects that optimally exploit the unique capabilities of ALMA during Early Science operations.

Further information can be found at www.eso.org/sci/meetings/2011/alma_es_2011.html or by emailing alma_es@eso.org.

This workshop will provide an overview of recent observational results on the stellar systems in nearby galaxy clusters, i.e. Fornax, Virgo, Coma et al., and a forum for discussion and comparison of theoretical models for the evolution of galaxies and larger-scale structures with observational properties of stellar systems in high density environments at redshift zero. The aim is also to identify those questions that can be tackled by the European Extremely Large Telescope (E-ELT), as the exceptional high angular resolution and collecting power of an extremely large telescope are essential ingredients for the study of resolved stellar populations at distances larger than 10 megaparsecs. The nearby clusters Fornax, Virgo, Coma et al. will be the first obvious targets of this exciting new era in extragalactic astronomy.

Topics to be covered include:

1) the faint end of the galaxy luminosity function in clusters: dwarf galaxies, ultra-compact dwarfs and globular clusters;
2) the bright end of the galaxy luminosity function: stellar populations and dynamics — observation and theory;
3) surveys of nearby clusters and their follow-up with the ESO Very Large Telescope (VLT) and future facilities (E-ELT, Atacama Large Millimeter/Submillimeter Array, ALMA); and
4) the 3D structure of nearby galaxy clusters and the morphological transformation of galaxies.

The number of participants is limited to the capacity of the ESO auditorium (about 90 participants).