Announcement of the Joint ESO and Observatoire de Paris Workshop

## Metal Production and Distribution in a Hierarchical Universe

21-25 October 2013, CNRS Observatoire de Paris Meudon, France

Metals trace the full evolution of the Universe: from primordial helium and lithium resulting from Big Bang nucleosynthesis to all heavier elements produced in stars and explosive events. Determining their relative abundances in different environments, and across cosmic time, reveals the underlying star formation history and gas exchange processes.

Recent progress in instrumentation and modelling now means that metal production and distribution can be used to test our ideas of galaxy evolution at many different hierarchical scales: from stellar clusters to clusters of galaxies. The hierarchical build-up of present-day structures at different redshifts can be followed, proceeding in parallel with the build-up of stellar and metal mass. These processes are interwoven: during most of cosmic history, metal production happens on stellar scales, but metal distribution is effective on spatial scales covering several orders of magnitude. Therefore simulations require exceptional computational power. Tracing metals across cosmic time needs an equivalent investment

in observational facilities. The meeting will review the state of the art in all the different research areas.

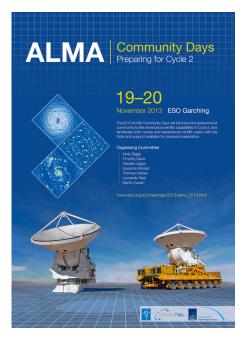
Proceedings will be published in the Supplement of the Memorie della Societá Astronomica Italiana in April 2014. Further details are available at the conference website: http://rencontres2013.obspm.fr

The deadline for early registration, and abstract submission, is 31 August 2013.

Announcement of the

## ALMA Community Days: Preparing for Cycle 2

19-20 November 2013, ESO Headquarters, Garching, Germany



ALMA, the Atacama Large Millimeter/ submillimeter Array, is currently carrying out Early Science Cycle 1 observations for the astronomical community. A global collaboration involving Europe, North America, East Asia and the host country Chile, ALMA is expected to be the leading observatory at millimetre and submillimetre wavelengths for decades to come. Early Science observations started in September 2011 with Cycle 0, and have already yielded data of unparalleled quality leading to spectacular scientific results. While the scientific capabilities offered in the current cycle are already greatly enhanced compared to the initial Cycle 0 capabilities, commissioning work is still ongoing and it is expected that further enhancements will be offered in the upcoming Cycle 2.

As for previous cycles, the ESO ALMA Regional Centre (ARC) will organise Community Days at ESO Headquarters in order to optimally prepare the European astronomical community for Cycle 2. The ESO ARC coordinates the network of nodes making up the European ALMA Regional Centre, which provides the interface between ALMA and the European scientific community. The Community Days will focus heavily on proposal preparation and include a series of presentations related to ALMA and Cycle 2, as well as hands-on tutorials for the ALMA Observing Tool and the simulators. These should enable novice and advanced users alike to create observing projects that make full use of the unique capabilities of ALMA in Cycle 2.

Further information can be found at: www.eso.org/sci/meetings/2013/alma\_2013.html