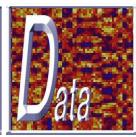




## **ASTROPHYSICS SEMINAR**









Wednesday, 9 June 2004 at 11:15

## The Atacama Large Millimetre Array (ALMA)

## **Robert Laing**

European Southern Observatory (Garching, Germany)

Abstract. ALMA is an array of 64 12 m antennas currently under construction under a bilateral agreement between Europe and North America on the Chajnantor Plateau in Chile at an altitude of 5 km. It is an aperture-synthesis array optimised for millimetre and sub-millimetre wavelengths, for which the site has excellent transmission. There are 250 antenna locations, so the array can be configured to sample a range of spatial scales up to a maximum resolution of 0.005 arcsec. Total-power operation is also possible. When complete in 2012, it will be the premier instrument for millimetre and sub-millimetre astronomy. It is designed to cover all frequency bands accessible from the ground between 31 and 950 GHz with excellent sensitivity. In operation, it will be integrated with the Japanese ALMA Compact Array (ACA) project, which provides four 12m and twelve 7m antennas, optimised for observations of large spatial scales.

This talk will outline the most important scientific and technical challenges facing the ALMA project and will describe recent progress.

NB: This seminar is following the seminar "Kinematics and dynamics of relativistic jets" at 10:30.

- Additional Information

The seminars are given in the ISDC "Pavillon" building
Address: INTEGRAL Science Data Centre, ch. d'Écogia 16, CH-1290 Versoix
WWW: ISDC Seminars: http://isdc.unige.ch/index.cgi?Science+seminars