

original
12/Nov/1999

RESOLUTION

between

the ALMA Coordination Committee (ACC)

and

**The National Astronomical Observatory of Japan (NAOJ) under the
Ministry of Education, Science, Sports and Culture (MESSC)**

**concerning coordination between the Large Millimeter and
Submillimeter Array (LMSA) and the Atacama Large Millimeter
Array (ALMA) projects in their design and development phases.**

Recognising

- the potential of large interferometric arrays operating at millimeter and sub-millimeter wavelengths to contribute to the study of a wide range of astronomical problems;
- the interest of the astronomical communities of Japan, of Europe, and of the United States of America in developing such an array;
- the interest of other astronomical communities, in participating in a large millimeter and submillimeter interferometric array project;
- the potential advantages of combining these aspirations in a single global project;
- the advantage of sharing the necessary design and development;
- the necessity to locate the LMSA and the ALMA at a dry, high altitude site;
- the identification of a suitable site in a region of the Altiplano in northern Chile, known as Chajnantor - Pampa la Bola area;
- the need to develop the site and design the technology to take greatest advantage of the site;

and Noting

- the preparatory work already underway in the United States on the Millimeter Array (MMA), the preparatory work already in progress in Europe on the proposed Large Southern Array (LSA), and the preparatory work already in progress in Japan on the proposed Large Millimeter and Submillimeter Array (LMSA);
- the work already carried out in Europe, and specifically the Combined Report of April 1997 and the LSA/MMA Feasibility Study of April 1998 prepared by the working groups of the "LSA Consortium";
- the support given by the National Science Foundation to the US National Radio Astronomy Observatory (NRAO) to carry out a design and development phase for MMA over the period June 1998 through June 2001;
- the work already underway for the design and development of LMSA supported by the National Astronomical Observatory of Japan (NAOJ);
- the Memorandum of Understanding between the European Organisations ("the European MOU") concerning the design and development phase of a large millimeter/submillimeter array;

- the Memoranda of Agreement between the NAOJ and the NRAO of June 12, 1995 and March 1998;
- the Resolution between the NRAO and the European Southern Observatory (ESO) signed in June 1997, and affirming a common interest in conducting discussions exploring the possibility of a merged array project;
- the progress made by ESO, NAOJ, and NRAO in negotiating with the Chilean authorities over the use of the identified site;
- the Resolutions of the ESO Council of September 15, 1998;
- the Resolution of the ECC and AUI of 20 January 1999;
- the Resolution of AUI, ECC, and NAOJ of 23 March 1999;
- the Memorandum of Understanding between the NSF and the European Organisations (the "Europe-US MOU") signed on 10 June 1999;
- the Resolution of AUI, ECC, and NAOJ of 10 June 1999;

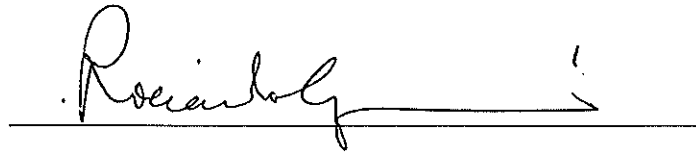
The Signatories resolve:

- to establish the appropriate liaison between the ALMA and LMSA projects in the Design and Development phase to continue to work together with the goal of ultimately defining an enhanced Atacama large millimeter/submillimeter array project;

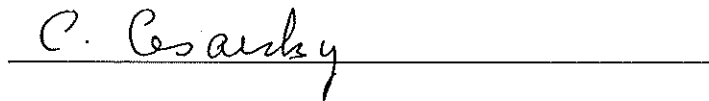
and to this end

- to establish as soon as possible a joint scientific and technical working group, to report to the Signatories during the year 2000;
- to use best efforts to obtain approval and necessary funding for their projects; and
- to continue to work towards a formal agreement on their collaboration on this enhanced project.

For the ALMA Coordination Committee



Professor Riccardo Giacconi
President
Associated Universities Inc
under the National Science Foundation



Dr Catherine Cesarsky
Director General
European Southern Observatory

For the National Astronomical Observatory of Japan
under the Ministry of Education, Science, Sports and Culture (MESSC)



Dr Keiichi Kodaira
Director General
National Astronomical Observatory of Japan

London, England
November 12, 1999