

**Activity Report of Commission J
November 2011 to October 2012**

October 31, 2012

Kenta Fujisawa (Yamaguchi University)

ALMA project

One of the major radio astronomy projects in the world is ALMA (Atacama Large Millimeter and sub-millimeter Array) project. The ALMA Project is a global partnership among East Asia (led by Japan), Europe, and North America in cooperation with the Republic of Chile to construct and operate a high performance radio telescope consisting of 66 element antennas at an altitude of 5000 meters in the Chilean Andes. The construction of ALMA is going on; the number of the antennas is 37 now.

ALMA has started Early Science observations. In this phase, the telescope will be used for scientific research for the first time, even though it is still under construction. Until now, observations made with the telescope have been made purely to test that its systems work as expected. The Call for Proposals have been issued on 2011 and 2012, inviting astronomers to draw up plans for scientific projects with ALMA. The first scientific observations are being made in parallel with the commissioning.



Figure: ALMA under construction. Credit: Tim van Kempen (ALMA)

Activities of meetings

- The 12nd Workshop on Millimeter/Submillimeter Receiver
Date: November, 18-19, 2011
Place : Osaka Prefecture University
Aims: The main objective of this workshop is to explore and discuss needs of future millimeter/submm and THz receiver systems.

- Japan Radio Astronomy Forum Symposium
Date: December, 15, 2011
Place: Tokyo University
Aims: To discuss on the future plans of radio astronomy in Japan, especially on the middle scale projects.

- ALMA User's Meeting 2011
Date: December, 26-28, 2011
Place: National Astronomical Observatory
URL: http://alma.mtk.nao.ac.jp/EA-ARC/ALMA_UM/ALMA_UM2011/index.html
Aims: To discuss on the status and the plan of use of ALMA.

- ALMA Workshop 2011 for extra-galaxies
Date: February, 9, 2012
Place: National Astronomical Observatory
Aims: To discuss on the plan of use of ALMA focusing on the extra galaxies.

- General meeting of the Japan Radio Astronomy Forum
Date: March 21, 2012
Place: Ryukoku University

- ALMA Workshop 2011 for extra-galaxies
Date: June, 11-12, 2012
Place: Japan Aerospace Exploring Agency / Institute of Space and Astronautical Science
Aims: To discuss on the plan of use of ALMA focusing on the star and circum stellar matter.

- ALMA Workshop 2011 for distant galaxies
Date: June 12, 2012
Place: National Astronomical Observatory
Aims: To discuss on the plan of use of ALMA focusing on the distant galaxies.

- ALMA Workshop 2011 for nearby galaxies
Date: June 27, 2012
Place: National Astronomical Observatory
Aims: To discuss on the plan of use of ALMA focusing on the nearby galaxies.

- Workshop on the our Galaxy 2012
Date: September 6, 2012
Place: Kagoshima University
Aims: To discuss on the recent results and new picture of our galaxy.