

Activity Report of Commission J November 2010– February2011

March, 1st 2011

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ALMA project

One of major radio astronomy project in the world is ALMA (Atacama Large Millimeter and sub-millimeter Array), which will be 66-element radio interferometer at Atacama Desert in Chile. It uses millimeter and sub-millimeter bands at 5000 meter high site. It is an ambitious system under international collaboration project with North America, Europe and East Asia. Some images by commissioning observations were taken and they showed ALMA has very good feasibility as a millimeter and sub-millimeter array. And proposals of the early science observations will be called from the end of coming March.

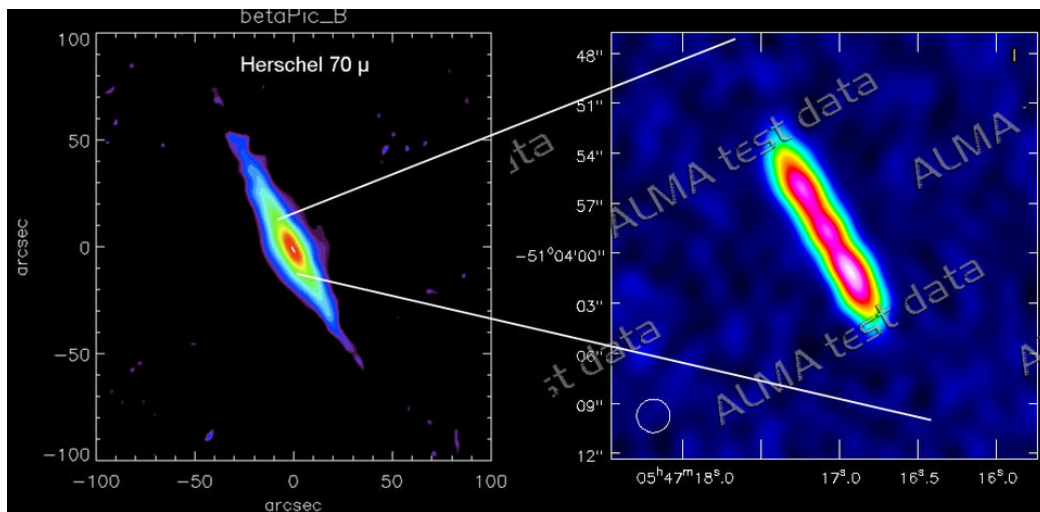


Figure: This shows the emission from the disk of dust surrounding the star Beta-Pictoris. On the left is an image at 70 microns from Herschel, (Olofsson et al., SDP Presentations, Madrid, Dec 2009) and on the right is the ALMA test data at 870 microns showing the denser material in the central region.

Credit: ALMA (ESO/NAOJ/NRAO)

Activities of meetings

- The 11th Workshop on Submillimeter-Wave Receiver Technologies in Eastern Asia

Date: November, 11-16, 2010

Place : Nagoya University

Aims: The main objectives of this workshop are:

To present the state-of-the-art and to explore innovative approaches for submm receiver systems and associated electrical, mechanical and thermal design

To explore and discuss needs of future submm and THz receiver systems

- ALMA workshop for star and stellar envelop research

Date : January 31 – February 1, 2011

Place: JAXA/ISAS

Aims: For the proposal applications of ALMA

- ALMA user's meeting

Date: January, 13-14, 2011

Place: National Astronomical Observatory of Japan, Mitaka

Aims: Business report of common use of ALMA

Status of ALMA was reported and methods of proposal application for the early science were shown.

- East-Asia Interferometry Winter School

Date: February, 7-11, 2011

Place: National Astronomical Observatory of Japan, Mitaka

Aims: This Winter School is aimed to provide lectures and software tutorials for young astronomers (graduate students and postdocs) interested in millimeter and submillimeter interferometric observations and/or VLBI observations.

- Workshop of nearby galaxies research by using ALMA

Date: February 10, 2011

Place: University of Tokyo

Aims: Research plan of nearby galaxies including the Milky Way galaxy by using

ALMA, especially at the time of early science observations. Also key science plans were discussed.