Subject: [allemploy] FYI: 17 July 2006 BIWEEKLY CALENDAR OF THE ALMA PROJECT at NRAO
From: "Alwyn Wootten" <awootten@nrao.edu>
Date: 7/24/2006, 8:53 AM
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BIWEEKLY CALENDAR OF THE ALMA PROJECT at NRAO
17 July 2006 - 31 July 2006

********** THIS FORTNIGHT**********
The Atacama Pathfinder Experiment (APEX) uses a VertexRSI 12-m sub-millimetre telescope, a variant of the ALMA prototype antenna, located on the Chajnantor site to provide access to the "Cold Universe" with unprecedented sensitivity and image quality. As a demonstration, no less than 26 articles based on early science with APEX are published this week in the research journal Astronomy & Astrophysics. Among the many new findings, most in the field of star formation and astrochemistry, are the discovery of a new interstellar molecule, and the detection of light emitted at 0.2 mm from CO molecules, as well as light coming from a charged molecule composed of two forms of Hydrogen.

Senate Report 109-280 - DEPARTMENTS OF COMMERCE AND JUSTICE, SCIENCE, AND RELATED AGENCIES APPROPRIATIONS BILL, 2007 has been issued. Some highlights:
RESEARCH AND RELATED ACTIVITIES
The Committee recommendation provides $5,991,690,000. The recommendation is $410,524,000 above the fiscal year 2006 enacted level and $28,322,000 below the budget request...

The Committee recommends the requested amount of $50,740,000 for the operations of the National Radio Astronomy Observatories. The operations, maintenance, and development of new instrumentation at the Very Large Array, the Very Long Baseline Array, and the Green Bank Telescope allow these world-class facilities to provide valuable research into the origins of the universe.

MAJOR RESEARCH EQUIPMENT AND FACILITIES CONSTRUCTION
The Committee recommendation provides $237,250,000. The recommendation is $46,369,000 above the fiscal year 2006 enacted level and $3,000,000 below the budget request...

The Committee recommendation includes requested funding for five continuing projects, as follows: $47,890,000 for the Atacama Large Millimeter Array [ALMA]; $27,400,000 for EarthScope; $28,650,000 for the IceCube Neutrino Observatory; $42,880,000 for the Scientific Ocean Drilling Vessel; and $9,130,000 for South Pole Station Modernization. The Committee feels that the highest priorities within this account are the projects that are currently under construction. The Committee understands that ALMA has recently been reviewed by NSF and may require additional funding beyond the amounts requested within the fiscal year 2007 budget submission. If additional funds are required for ALMA, the Committee will consider a reprogramming of funds from within the resources provided in this account to accommodate such funding needs.

NASA Administrator Mike Griffin announced restoration of funding for SOFIA at a public meeting of the NAC Science Committee and Subcommittees. Speech by Griffin:"I now believe the best course going forward is to continue SOFIA, with some significant management changes." See
http://www.nasa.gov/pdf/152609main_griffin_sofia.pdf

Past issues of this Calendar may be viewed at

http://www.cv.nrao.edu/~awootten/mmaimcal/ALMACalendars.html
See also the JAO ALMA Calendar overview at:
http://www.alma.cl/alma_project
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General Happenings
Sky: Jupiter dominates the evenings. Mars is low in the glow of sunset.

Santiago: Please be informed that starting July 19th, 2006, Alvaro Leiva, the new JAO Human Resources Manager will start work at the JAO in Santiago. For more information, please see
http://www.cv.nrao.edu/~awootten/mmaimcal/MemoALeiva.pdf

AOS (Array Ops Site, 16570ft altitude): From 14-21 July, the APEX facility has registered a little more than 1mm of PWV on parts of the nights of 15-17 July, and less than that at other times.

OSF (Ops Support Facility, 9600ft altitude): Currently there are approximately 65 persons working at the site of which approximately 59 use the ALMA and ContractorÕs lodging facilities. Final mass excavation of the OSF at the intersection with the access road shall be completed by the end of July.

NAASC: VxRSI Antenna: First article acceptance tests for the azimuth and elevation bearings, drive motors and hexapod are scheduled for completion in July. Review panel for PreProduction Design review 27-29 Sept will be chaired by Peter Napier. Nutator: Received cost and technical bids from 3 companies. One company issued a no-bid response. Art Symmes is leading the evaluation of bids. OPT: Two companies are currently reviewing draft technical specification for OPT. (ESO): The Transporter PDR has been scheduled for 31 July - 1 Aug. EU Project Scientist Tom Wilson will visit afternoon 27 July and 2-6 August.

NTC: Band 7 cartridge: The first cartridge was shipped by IRAM to the NA FEIC! The Band 7 cartridge CDR meeting will take place on 16-17 Aug 2006 at IRAM in Grenoble. A FE face-to-face takes place 25-6 July in CV, while the FE LO CDR takes place there on Jul 27-28.
Rich Lacasse became resident in Charlottesville and is now devoting most of his time to the ALMA correlator. Airflow studies of correlator with TFBs continues. A review of the correlator Specification B revealed that four listed modes using 4-bit X 4-bit correlation with full polarization cross-products cannot be supported (there are enough correlator resources, but the required interconnections are not possible).

AOC: Computing subsystem leads met face to face in Garching. Final Computing subsystem (Offline = CASA) CDR4 meeting was held. PSI system connectivity is achieved; progressing into lab interferometry though issues remain with Master laser and LORR; Walsh function switching is in place in 2nd LO.
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DAILY CALENDAR (Times EDT) see
https://wikio.nrao.edu/bin/view/ALMA/AlmaCalendar
Mon 17 Jul Marine Day Holiday, Japan
Tue 18 Jul
10:30 AM-11:30 AM: JAO IPT Telecon followed by CCB telecon
Wed 19 Jul
Thu 20 Jul
Fri 21 Jul As dawn brightens on Saturday morning, the waning crescent Moon hangs above Venus in the east-northeast.
All Day: ARC Managers meet with JAO Director in Garching, video CV-230
12:00 PM: Friday U. Va.- NRAO Lunch talk--Rob Reid, Penticton
Sat 22 Jul
Sun 23 Jul

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 Mon  24 Jul
 Tue  25 Jul New Moon 12:31 a.m. Eastern Daylight Time;
All Day: FE face-to-face CV
10:30 AM-11:30 AM: JAO IPT Telecon
4:00 PM-5:00 PM: NAScienceIPT teleconference
 Wed  26 Jul
All Day: FE face-to-face CV
ScienceIPT teleconference
 Thu  27 Jul
All Day: FE LO CDR CV
 Fri  28 Jul
All Day: FE LO CDR CV
 Sat  29 Jul The weak, long-lasting Southern Delta Aquarid meteor shower
             is at its maximum activity around this date.
 Sun  30 Jul
 Mon  31 Jul
****************************** UPCOMING EVENTS ****************************
 Jul 25-26                      FE face-to-face        CV
 Jul 27-28       all day        FE LO CDR              CV
 Aug 2                          ASAC Telecon
 Aug 3                          ALMA Board Telecon
 Aug 8-9                        B7 cartridge CDR       Grenoble
 Aug 14-25                      IAU Meeting            Prague
 Aug 28                         Move of PSI to ATF
 Aug 31                         SpecReview: Production Laser Synthesizer CV
 Sept 16-17      all day        ASAC face-to-face      Arcetri
 Sept 22-23      evening        Dave Matthews Band    CV JPJ Arena opening
 Sept 27-29                     Vertex RSI Revies      Essen
 November 9-10   all day        ALMA Board Meeting     Madrid  TBD
 Nov 13-16    all day Science with ALMA: a new era for Astrophysics Madrid
****************************** TECHNICAL NEWS *****************************
ALMA MEMO 551: Cross-polarization characterization of GORETEX slabs at
band 9 frequencies by A. M. Baryshev , M. Candotti , N. A. Trappe

Abstract: GORETEX material, commonly used in radomes, is known to be
transparent at microwave bands [1]. In ALMA a thin GORETEX membrane will
 cover the aperture through which the RF beam enters the cabin at the
 primary vertex hole [2]. Slabs of GORETEX are also generally employed
in windows for intermediate temperature shields inside the cryostat. The
 purpose of these windows ideally is to allow the beam to pass through
them without introducing any alteration of the beam properties. Main concern
has to be put on RF loss, but also in cross-polarization
efficiency degradation. This report will stress on the results we have
 obtained in relation of loss of cross-polar efficiency of a linearly
polarized beam passing through a GORETEX slab, depending on its
orientation relative to the direction of polarization of the beam.

View a copy of this memo at:
http://www.alma.nrao.edu/memos/html-memos/alma551/memo551.pdf
*****************************ALSO OF INTEREST*****************************
ESO has an opening for European ALMA Project Scientist.  Please see:
http://www.eso.org/gen-fac/adm/pers/vacant/alma_project_scientist_2006.html
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ALMA has openings for Head of Science Operations, Head of Technical
Services, and Head of Administration.  Please see:
http://www.nrao.edu/administration/personnel_office/careers.shtml
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Please send information for upcoming calendars by Friday evening of the
preceding biweekly period to Jennifer Neighbours or Al Wootten via e-mail
(jneighbo at nrao.edu or awootten at nrao.edu).
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The calendar will be issued between late Friday and sometime on Monday by
e-mail to all NRAO scientific staff members and anyone else interested.
A specific mailing list, alma-info, has been created for anyone wishing
to receive it.
Past issues are available at
http://www.cv.nrao.edu/~awootten/mmaimcal/ALMACalendars.html

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