

Subject: [allemploy] FYI: 24 Oct BIWEEKLY CALENDAR OF THE ALMA PROJECT at NRAO
From: "Alwyn Wootten" <awootten@nrao.edu>
Date: 10/27/2005, 4:32 PM
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BIWEEKLY CALENDAR OF THE ALMA PROJECT at NRAO
Oct 24, 2005 - Nov 7, 2005

***** THIS FORTNIGHT*****

Some 74 panel members, ALMA Personnel and assorted interested parties met for the Cost Review of the rebaselined ALMA budget in Garmisch-Partenkirchen 13-16 October. The scope, schedule and budget of the proposed 50-antenna baseline project was reviewed in detail, with several follow-on sessions exploring specific planning issues such as integration with ALMA-J. The information presented was comprehensive, and the verbal report from the panel at the end of the review was generally positive. The panel noted that "the science capability of a 50-antenna array was extremely exciting, and that ALMA remains an extremely exciting project for the future". The detailed written report is expected late November.

The ALMA Board will meet in Santiago 31 Oct through 2 November.

Past issues of this Calendar may be viewed at
<http://www.cv.nrao.edu/~awootten/mmailcal/ALMACalendars.html>

See also the JAO ALMA Calendar overview at:

http://www.alma.cl/alma_project

General Happenings

Santiago: The AUI Board of Trustees meets in Santiago 26-27 October.

OSF: The AUI Board of Trustees will visit the ALMA site 28-29 October. The Contractor's Camp is functioning; see <http://www.alma.nrao.edu/>

AOS: Construction of the AOS Technical Building continues.

ATF: Vertex continues to work on their antenna.

NAASC: Registration for the Z-Machines workshop has closed. 70 participants are expected: 19 speakers, 36 contributions (some talks, some posters).

DAILY CALENDAR (Times EDT) see

<https://wikio.nrao.edu/bin/view/ALMA/AlmaCalendar>

Mon 24 October

Tue 25

10:30 AM-11:30 AM: JAO IPT Telecon

4:00 PM-5:00 PM: NAScienceIPT teleconference (open to all interested parties) (434)296-7082

Wed 26

Thu 27

10:30 AM-11:30 AM: Management IPT telecon

Fri 28

Sat Oct 29

Sun Oct 30

Mon Oct 31

All Day: Executive/JAO Meeting

Halloween

Tue Nov 1

All Saints Day Holiday, Chile

All Day: ALMA Board Meeting, Santiago

10:30 AM-11:30 AM: JAO IPT Telecon
4:00 PM-5:00 PM: NAScienceIPT teleconference (open to all interested parties) (434)296-7082

Wed Nov 2
All Day: ALMA Board Meeting, Santiago
Thu Nov 3
All Day: ALMA Board Meeting Closed Session, Santiago
Fri Nov 4
Sat Nov 5
Sun Nov 6

***** UPCOMING EVENTS *****

ALMA Calendar--<https://wikio.nrao.edu/bin/view/ALMA/AlmaCalendar>

- * Oct 26-27 -- AUI Board, Santiago
- * Nov 1-2 -- ALMA Board, Santiago
- * Nov 8-9 -- ESO Finance Committee
- * Nov 8-9 -- ALMA-J Antenna SRR, Osaka
- * Nov 10-11 -- ACA System Review, Tokyo
- * Nov 21-22 -- SSR Meeting, Charlottesville
- * Nov 30-Dec 1 -- National Science Board meets
- * Dec 7-8 -- ESO Council Regular Meeting
- * Jan 4-7 -- URSI/NA, Boulder
- * Jan 12-14 -- ALMA Zmachines workshop

***** TECHNICAL NEWS *****

ALMA Memo 530: Coherence estimation on the measured phase noise in Allan standard deviation.

Author: Hitoshi KIUCHI

Abstract: In this memo, a technique for signal coherence loss estimation for Interferometer is introduced. We discuss the coherence loss caused by the phase noise in order to find out the cause of dominant coherence-loss source, and introduce a concept of coherent integration time. The coherence loss can be calculated from the measured phase stability in Allan standard deviation. The key of an interferometer is to maintain the signal coherence. In a connected interferometer, the instability of the distributed common reference signal is compensated for as a common noise. On the other hand, the independent instability of each element decreases the signal coherence. For ALMA, the instability of LLC (Line length corrector), WMA (Warm multiplier assembly) and CMA (Cold multiplier assembly) are independent and/or mounted on independent antennas. The frequency standard (including signal transmission and multiplier chain) of ALMA must be stable over the long-time period (up to observation time) and the short-time period (coherent integration time for fringe detection) to maintain the coherence. We will discuss the required phase stability and the coherence loss in the Allan standard deviation. This coherence estimation is essential for the VLBI application. As a result, the ALMA specification is good enough to keep the coherence, the estimated instrumental coherence losses are 5 % in LO, and 10 % in total (exclude atmospheric scintillation) at 938 GHz with over 260 sec coherent integration time.

A pdf copy of this memo is on edm.alma.cl and will eventually appear at:
<http://www.alma.nrao.edu/memos/html-memos/alma530/memo530.pdf>

***** ALSO OF INTEREST *****

-----TENURE TRACK ASTRONOMER POSITIONS-----

The National Radio Astronomy Observatory (NRAO) invites outstanding applicants for tenure track astronomer positions. In the next few years, the NRAO expects to make one or two appointments per year. Appointments are not restricted to radio astronomers. See http://www.nrao.edu/administration/personnel_office/careers.shtml#tenure

-----ALMA Postdocs-----

2006 Postdoc Position at the North American ALMA Science Center/ALMA

Construction

The National Radio Astronomy Observatory expects to invite applications for a NRAO Postdoctoral appointment at the North American ALMA Science Center in Charlottesville, Va. These positions provide 50% time for independent research, with the remaining 50% assigned to project and operational duties at the sites.

The position is funded by a grant from the National Science Foundation through the ALMA Construction Project. See

http://www.nrao.edu/administration/personnel_office/careers.shtml#alma

2006 ALMA Postdoc Positions at ESO

For the first time this year, four dedicated ALMA/ESO fellowships will be offered (two in Garching and two in Santiago) in addition to the several regular fellowships offered at both places. Please see:

<http://eso.org/gen-fac/adm/pers/vacant/fellows2005-6.html>

Please send information for upcoming calendars by Friday evening of the preceding biweekly period to Jennifer Neighbours or Al Wootten via e-mail (jneighbo@nrao.edu or awootten@nrao.edu).

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/mmailcal/ALMACalendars.html>

Allemploy mailing list

Allemploy@listmgr.cv.nrao.edu

<http://listmgr.cv.nrao.edu/mailman/listinfo/allemploy>