

SWG Chairs Meeting
12 July 2016, 1300 – 1400 UTC

RB: first of all welcome some visitors here at SKA0

Hiroyuki Nakanishi visiting from Japan, here for the last month and here until November.

Antxon Alberdi just arrived a couple of weeks ago and will stay for 3 months

1) SKA – Athena Synergy White Paper Update (Robert)

RB: now have some volunteers who have agreed to serve as the writing team for the white paper. They are: Rosella Cassano (chair), Rob Fender, Chiari Ferrara, Andrea Meloni. Some workshops over the next few months. White paper to be produced for middle of next year. E-mail will be circulated looking for EOI in those workshops and helping with writing.

2) SKA1-Mid Band 5 split ECP (Robert)

RB: an ECP was just submitted to change Band 5 from a 3:1 (4.6 – 13.8 GHz) to 2 octave bands (4.6 – 8.5 GHz and 8.3 – 15.3 GHz). Digital side could be much simpler so could do with a single sampling system running at either 9 or 16 GSps, rather than a dual interleaved 15 GSps design, so it could be cheaper. Sounds good but the question of whether this is practical in engineering terms is yet to be answered. From the science side you only lose the ability to simultaneously look at top and bottom ends of the band, but overall you gain in time needed due to improved noise performance. Lots of technical questions to address.

JPMc: this would have some ramifications for pulsar searches in the Galactic Centre. Can I look at the numbers?

RB: we can send you the numbers to play around with.

ZP: if we go this way what are the chances that one of these will be discarded later to reduce costs?

RB: it is 2 feeds within a single cryostat, so it really wouldn't save much to only have 1 LNA. It would need to be a totally different system to change significant money. Recall that in re-baselining the prioritisation was Band 2, then Band 5 and then Band 1.

JC: I worry about this ECP as it has consequences for if we ever want to upgrade up beyond 15 GHz. Would there be space on the indexer/cryostat for another receiver? We are spending a lot of money to get antennas that work to 20 GHz.

RB: That is correct, we ultimately want up to 25 GHz. This is mentioned in the ECP also. The upgrade path to 25 GHz must not be

ruled out.

3) SKA1-Low VLBI ECP (Evan)

EK: just preparing this now. No VLBI currently in LOW design. Spoke with several people at VLBI session at EWASS last week and there is a demand for this, and several science applications can benefit (HI, pulsars, ...). Will pass the ECP text by Zsolt, Cormac and JPMcQ (and whoever else is interested) before I submit it. Should be good overlap with FAST (3 of its 7 receivers will be in the LOW band and one >270 MHz will be there from day 1) and of course GMRT as well as a few others.

4) EWASS SKA session report (Jeff/Evan)

JW: 60 people at least attending the SKA special session, feedback all positive, stand with people calling by

RB: should we do something like this again for next EWASS? I was impressed with the turnout. What do you all think?

ZP: probably not the same format. Maybe try to invite astronomers from outside radio to speak?

RB: agree that doing the same thing is not interesting, but should we do something? and if so, do what?

Everyone to think about this and reply by email on this point.

ZP: On the VLBI special session. Very helpful. Had 20+ people. Unfortunately it was quite late on the last day. We also want to expand the audience for future fora.

5) Goa Science Meeting (Jeff)

JW: announcement went out a couple of weeks ago and now 170 people have either pre-registered or fully registered by now. People should book their flights and hotel soon as prices are rising fast and rooms are booking up. End of July is the abstract submission deadline. SOC will then be asked to help sort out the schedule. We have 9 break out rooms for the KSP days.

JP: can we add KSP sessions on the webpage?

JW: yes we can add that

RB: good idea

MM: were there any particular things you wanted us to address?

RB: let's devote a separate discussion by telecon for just that in August/September.

JW: personal safety has come up as an issue in Goa, raised by many

people. The hotel will pick everyone up from the airport directly. Everything suggests that as this is a major tourist area that this is a relatively safe area, crime wise.

RB: if you are particularly worried note that the venue is at the hotel. It's a very nice location, on the beach. Fairly upmarket venue. Goa generally is also relatively safe in and of itself.

6) AOB

RB: SKA Engineering Meeting in Stellenbosch on October 1st to 7th. Don't need to be an engineer to attend! If you are interested please go, as you will be welcome.