

## SWG Chairs Telecon 17-November-2020

Notes: Evan Keane

Participants: SWGs: Abhirup Datta, Adriano Ingallinera, Andrei Mesinger, Divya Oberoi, Francoise Combes, Jan Forbrich, Jason Hessels, Josep Miquel Girart, Laura Wolz, Laurent Lamy, Mark Sargent, Natasha Hurley-Walker, Phil Edwards, Sarah Blyth, Sebastien Mueller, Stefano Camera, Valentina Vacca

Apologies: George Heald, Willem van Straten

SKAO: Robert Braun, Anna Bonaldi, Tyler Bourke, Philippa Hartley, Evan Keane, Jeff Wagg

### Today's Agenda

- Next Science Meeting
- Next Science Data Challenge: SDC2
- SKA Observatory Development Programme: SODP
- AOB

RB notes that a Confluence workspace for the SWG Chairs should be in place ahead of next month's telecon, available as a forum for communication and sharing of information

### Topic: Next Science Meeting

AnnaB summarises info for the next SKA Science Meeting. 15-19 March 2021, fully virtual and using the OnAir platform. Will have a mix of plenary talks, splinter sessions and posters sessions. Abstract submission will open on OnAir platform ASAP.

Platform allows pre-recorded talks to be re-played with live Q&A sessions, repeated in different time zones. Showed the working example of session times and spacings, with repeat sessions 1/2 a day later to cover more time zones.

JasonH: some SWGs have no one single convenient time zone for splinter sessions

AnnaB: yes, such groups can have more than one slot

### Topic: Next Science Data Challenge: SDC2

PhilippaH: SDC EoI deadline closed on Oct 31st. 30-40 interested teams is our estimate. This week will open formal registration and will be open until <= Dec 11th. Dec: validation cube available. Jan 15th: Challenge processing begins. July 15th: Challenge ends.

SDC2 Data cube has been fully prepared now, incorporating SWG feedback and suggestions. 1 TB neutral hydrogen data cube with artefacts.

Registration is on a per team basis. Each team will have access to 1 processing facility as determined by each team's resource needs, e.g. CPU, GPU, disk, VM or queue-based, etc. needs. 8 centres across the world involved - in UK, Switzerland, Portugal, France, Spain, Italy, China and Australia.

SDC2 scoring code almost ready. Aim to have ready by time validation data is available. Live leaderboard would connect to this and reflect processing of validation data, keeping unseen data score until the end of the challenge.

SDC2 will have associated reproducibility awards, in a partnership with the Software Sustainability Institute (based in UK). Full replication maps to published, linked and executable code and data.

NatashaH-W: containers would be best for reproducibility  
PhilippaH: agreed

JasonH: this is using SRC like infrastructure. Will the feed-back from this be fed back to SRC working groups.  
Philippa: exactly this will happen

SarahB: will teams be able to choose their favourite centre?

PhilippaH: teams will have top 3 choices and we will try to match to 1st choice if we can. Will have space to justify the choices in registration form.

AnnaB: hopefully we have enough resources for everybody's needs. Will go in registration order in allocation.

### **Topic: SKA Observatory Development Programme: SODP**

TylerB described the Science Road Map, Technology Road Map and the Development Plan. SciMap is an External Group Chair by Science Director to identify new science enabled by ODP. TechMap counterpart is also external advisory group chaired by Project Engineer. DevPlan is then evolving plan for the ODP, as informed by the road maps.

Timeline of ODP shows for year 1-10 of SKA construction. Smaller "studies" leading into larger "projects"

MEUR/year budget is 0, 0, 1, 1, 1.5, 1.5, 1.5, 1.5, 12+1, 18+1, 18.5+1.5 for first 1-11+ years with 18.5 (projects) + 1.5 (studies) the steady state scenario. Start of "year 1" is mid 2021. Advisory Group needs to be put in place ahead of that.

Science Advisory Group Membership needs to be determined as well as the relevant parameters they are working within. Balance and diversity needed in many ways (national, senior/junior, science) but at the same time don't want the group to be huge. Will be inviting applications (including self-nominations) soon. SEAC will not be members, so that they will be able to independently review outcomes. Selection committee is the SKA science team, with DG approving and inviting. Membership will be for limited terms, so commitment is constrained.

An extensive list of technical upgrade options needed from this group (with high TLR), e.g. PADs, WBSPPs, but not MFAA (low TLR). Limited scope for very large options, or items with low TLR. Focus is just after completion of construction, 2030-2035 time frame. Focus will be on high TLR upgrades, or DB completion, options, e.g. what is relative scientific return of deploying different SKA1 Mid bands?

MarkS: will the work change what is being deployed?

RB: most contracts defining the construction build will be let in next 12 months, so no that is not anticipated.

**Topic: AOB**

Josep Miquel reported that the kick-off zoom for the refreshed CoL core-group will take place on 30 November.

Abhirup reported on the new series of monthly EoR/CD SWG remote seminars, whereby several short talks, particularly by relatively junior members are given each time. This is proving very popular.