SKA SWG chairs meeting notes 18 Jun 2024

Chairs attendees:
Marta Spinelli
Rohit Sharma
Adrian Liu
Betsey Adams
Bhal Chandra Joshi
Catherine Hale
Cherry Ng
Fatemeh Tabatabaei
Fernando Camillo
Jacco van Loon
John Ilee
Marc Audard
Neeraj Gupta
Nicola Bellino
Viviana Casasola
Aris Karastergiou
Jason Hessels
Jack Radcliffe
Ke Wang
Eleonora Bianchi

SKAO attendees: Braun, Williams, Bonaldi, Bourke, Hartley

Sarvesh Sridhar (Operations team) discussing SKA Tools:
Slides 3-35
- Sensitivity calculator
q's:
Custom array allows to specify number of stations
Weighting is standard image weighting (robust briggs, natural, uniform)
Feedback google doc: Not everyone has access to Google docs. Will make a pdf available. Email response is also fine.

- Staged delivery/ Array simulator

- Subarray templates library
Jason notes for some applications bad looking subarrays may actually be ok e.g. for transients (ie non-imaging). SS this is good feedback that we want to hear.

Jason, Bhal Chandra, Fatemeh, Catherine - positive response on similar sessions covering the SKA Tools for SWGs - wider audience.

Q's:

Neeraj - consider ALMA use case, pick a subarray for a given resolution?
Templates allow user to pick relevant one.
Note: Can't design a subarray at time of observations.
RB: serendipity, and commensality allows greater flexibility than finding only what you are looking for.
Jaco - clarify can we use data for multiple science cases?
RB: should be in proposal and will be able to request multiple data products.

Bhal Chandra: subarray tool includes mix of MK and SKA dishes?
yes. Can also request subarrays with only MK or SKA.
Note not all subarrays are in sensitivity calculator yet.

Braun: SKA-Low AA* rollout optimisation (slides 36-38)
- proposed locations of stations for AA* results in a low quality point spread function (PSF)
- instead of populating few clusters with completed set of stations (6), will populate more clusters with 3-4 stations each
- PSF is much improved

Braun: construction update
Low: 4 Stations (256 antennas/station) will be used for AA0.5 (test array); to date three of these are fully populated and work has started on the 4th. Signal has been received by two stations
Mid: First 3 dishes being erected on site. The dish structure for the first dish is soon to be placed on its pedestal ("big lift").

Hartley: SKASci25 in Gorlitz Germany **16-22 June 2025** (slides 45-52)
Jaco : how much time for each SWG for session?
1.5 days for parallel sessions. Maybe smaller groups less. Each group should have 3/4 of a day (4hrs). Working on provisional programme for feedback.

Hartley: Science book refresh (in conjunction with SKASci25) (slides 53-59)
How long should the draft chapters be?
Last time 8 pages for short and 15 pages for longer (review scale papers)
And final? Same length, just more polished?
Yes, aim for final draft submitted

Jaco - can it include cases for e.g. high frequency extensions, beyond current capabilities.
Yes, see later slides, but can and should think beyond design baseline.
Marta - should we coordinate to ensure lack of doubling 'introductions' or should single papers be standalone?
Yes - try to by coordinating introduction chapters for each section. (Theme rather than SWG).

Note book content: should consider synergies and commensality in each chapter (additional option)
Betsey - science themes is good, but how to check for overlap across SWGs.
Try to encourage coordination within theme, some duplication probably ok.

[CLOSE]

Other agenda items not covered due to lack of time (See the slides):
Science Data Challenge 3b
SWG Collaboration Framework
Reminders & Information