

## SKA SWG Chairs meeting 20/02/2024

### Attendees:

SKAO: Tyler, Anna, Wendy, Philippa, Harry

Chairs: Ke Wang, Pietro Zucca, Sebastien Muller, Jack Radcliffe, Betsey Adams, Abhirup Datta, Mark Sargent, Andrei Messinger, Fatemeh Tabatabaei, Adriano Ingallinera, Viviana Casasola, Bhai Chandra Joshi

### SLIDES (see the actual slides for more information):

Design baseline

Array releases

Road to science

Construction update

- Low AA0.5 : S8(2) 9(1) 10(1)

- Mid SKA001, SKA100, SKA036, SKA063 - 1.36 km baseline

SKAO

- member updates

Mark S. - what would the contributions for the listed for prospective members include?

Beyond AA\*?

Tyler - Ones listed here (e.g., not yet members) are included for AA\* costs. Would need increased contributions from current members to go from AA\* to AA4. And also via New members (though this will require different discussions due to construction contracts already being filled and the desire for some new members to get fair share of construction contracts).

### Science data challenges

SDC3 - Philippa

Mark S. - are the final solution catalogues also published? For the full field. For SDC1 and 2.

Philippa/Anna - yes, truth catalogue is available, please see the SDC webpages.

<https://www.skao.int/en/science-users/160/skao-data-challenges>

### SDC4 – Magnetism – Anna

Fatemeh - are there faraday depolarisation effects included? Should be higher at higher freq?

Anna - to ask Robert.

[post-meeting update: regarding the Faraday depolarisation effects in SDC4, yes, there will be an attempt to introduce this phenomenon (using the differential rotation across each data product “channel”). Regarding the “higher at higher frequency” question, it all depends on the frequency sampling strategy that is used. For equal channel widths (measured in Hz) the depolarisation effects are much stronger at low frequencies, by a factor of  $\nu^{-3}$ , however since we are adopting a channel width that scales as  $\nu^{-3}$ , we are deliberately making the effect equal at all frequencies.]

Abhirup - what will be the challenge? Evaluation on?

Anna - finding the extragalactic sources (in foreground and background) and characterise properties, especially polarisation angle -> rotation measure.

## Meetings

SKA 2025 will have opportunities for SWGs to meet in person

## AOB

Bhal Chandra - pulsars, relook at Sicily SKA chapters, revise science cases towards working out eventual KSP proposals

Bhal Chandra - documents. Pulsar chairs keep docs in personal dropbox and hard to transfer. Can SKAO 'host' these docs?

Tyler - some docs can be put on the SKAO SWG webpages

Philippa - we have been looking into solution for SWGs to store things (docs, meeting notes) under discussion with IT. Looks like confluence might be the solution.

Bhal Chandra - free slack means documents disappear. Could be for core members?

Philippa - we are looking into it.

Andrei - revisit old topic, centralising/streamlining SWG membership via webform. Also option to remove oneself. Yearly, click here if still interested?

Tyler - hopefully can be done. Not thought about removing old members.

Anna - please still use the old system.

## Chat discussion:

Mark S - Some documents used to be easier to find on the "old" SKAO website, but appear to have disappeared with the switch to new website.

Tyler - Some documents have been deliberately removed Mark. If there are particular documents that are "missing" pls let us know.

Mark - For instance, up-to-date "timeline to science" documents. These are of broad interest.