SWG Chairs Telecon 18-May-2021

Participants: SWGs: Valentina V., Natasha H.-W., Adriano I., George H., Stefano C., Patrick W., Sebastien M., Barbara C., Phil E., Mark S., Fernando C., Abhirup D., Laura W., Paolo S., Andrei M., Jason H., Jose Miguel G., Tao An,

Apologies: Aris K., Francoise C., Divya O., Anna N.

SKAO: Robert B., Tyler B., Philippa H., Anna B., Jeff W.

Topic: Science Data Challenge 2

PH: - We are about halfway through SDC2, with 300 registrations, and now beginning to see people become quite active

- Also, we are at the stage where we want to make the challenge more accessible
- We want to make sure there are no teething problems with accessing data at centres or running their pipelines. This will allow us to investigate the tools that might be used on SRC model
- We have two development datasets that can be used for training, accompanied by continuum images and HI source catalogues
- Sent around survey to participants in order to understand any problems and get general feedback
- Had feedback from 12 teams: the comments were very useful and they are helping us to understand where we need to put more support. Most teams are very active and are hoping to analyse full dataset. Also requested more support from SKAO. Some issues connecting to HPC and deploying pipelines, which we want to make smoother
- We are issuing reproducibility awards to teams and have partnered with the Software Sustainability Institute.
- Have scheduled some informal telecons to see how teams are doing, and to demo a new version of our scoring service. Array of different solutions being developed to characterize HI sources. Time is an issue, but SKAO is available to support
- Credit to operations team for support in scoring service. New tool is automated and updates leader board. We are pleased to see the results. More can be read on our website
- SDP are developing pipelines for RFI removal, and we want to tie this work into simulations that can be presented to community. Currently not possible to simulate full SKA1-scale datasets and so artifacts are currently being added into image plane rather than (u,v) plane
- If you would like any info please see the SDC website. We have also begun preparing papers on the new version of T-REX and also one presenting results of SDC2

RB: - we are also advertising for a postdoc to work on the data challenges so if anyone knows of good candidates, please encourage them to apply

PS: - one comment is that the current dataset is almost too perfect, and we could help to include more realistic artefacts in future datasets

Topic: AOB

Mark S: - We decided to postpone joint session with continuum and HI groups which will happen at the end of this month and others from outside our groups are welcome to join.

Adriano I.: - Not much to say except that we are struggling to get our members more involved in activities like seminars. Are trying to figure out how best to overcome this problem.

George H. – Planning our next in a series of plenary meetings, with talks delivered by members of our working group and aiming for a diversity of talks and members. Date will be announced soon (sometime next month). Working toward proposal for future Magnetism data challenge.

Valentina V. – More than one month ago we had discussion with Natasha and Mark from continuum group to explore commensal survey with SKA1-LOW

RB: - Yes, we are also in discussion with Takuya on how we can support Magnetism Data Challenge. Next week we have meeting with EoR/CD group to discuss their challenge

Laura W.: - Still in process of renewing management teams of Cosmology focus groups. Synergies has discussions going on.

Phil E. – In ATNF, RACS survey data is out, and Catherine Hale is addressing final referee comments. Monthly ASKAP science forum meeting took place. Tomorrow we are lighting Parkes dish orange for national volunteer week. Tomorrow proposal call for ATNF telescopes, deadline June 15. Pleased to see that Sarah Pearce has been hired as director for SKA-LOW

RB: yes, very pleased about this, and also that Lindsey Magnus will be the director for SKA-MID. Also, big welcome to Barbara!

Barbara C. – very pleased to be here, and only update is that reported by Mark on joint HI continuum meeting.

Josep G. – request to update public webpage on SKA and we are continuing online Cradle of Life webinars for our group. Maybe next year we will organise science meeting, possibly with Our Galaxy group

Andrei M. – Thinking about EoR/CD data challenge and working on Figures of Merit to be discussed during telecon with SKAO next week. Precursor experiments are going ahead, and we are working on interpreting new HERA upper-limits which are the best so-far

Abhirup D. – Monthly telecons still ongoing

Jason H. – Thinking about how to include transients in future data challenge, have contacted Philippa and Anna. Also preparing for future FRB meeting: https://forms.gle/Kavp4a2RxV5MbWyv5

Fernando C. – second round of MeerKAT proposals approved last year and have observed ~400 hours so far. Nice paper in Nature on the interaction of AGN jets and intercluster magnetic field. Finally started last of large survey projects (8 now running). Lots of good quality data collected. MeerKAT extension project has been joined by Italy/INAF and the next correlator will be GPU-based.

Tao An: East Asia SKA meeting taking place next week. Also, will be in touch with Cormac to discuss VLBI data challenge. Some on-line seminars that might be of interest are listed below:

- http://cssgps2020.umk.pl/6th Workshop on Compact Steep Spectrum and GHz-Peaked Spectrum Radio Sources (umk.pl) the science targets are compact radio AGNs, which are most suitable for VLBI observations.

- https://www.evlbi.org/evn-seminars The sharpest view of the radio Universe
  A series of 7 talks, covering 7 different science topics with 7 different speakers, are allocated during 2020-2021.
- https://www.ucc.ie/en/evn2021/ EVN Mini-Symposium & User's Meeting
  This should happen in last summer. However, due to the spreading of COVID-19, the symposium has to be postponed and to switch to online.
- Latest science highlight in VLBI: Polarised light reveals the magnetic field around M87's black hole, by EHT collaboration. Although this is made at higher frequency than the SKA's capacity, it demonstrates the unique power of VLBI. https://iopscience.iop.org/article/10.3847/2041-8213/abe4de

End of meeting.