

Australia-India Collaboration on EoR

Global EoR observations

- Both the countries have vibrant communities working on detecting the global signal.
- Possible collaboration between RRI and MWA groups on SARAS-3.

MWA data on EoR

- MWA is one of the leaders in measuring the EoR power spectrum. RRI has been involved till recently.
- Possibility of a pan-Indian involvement discussed.
- Given the complexities related to the instrument(s), it is not feasible to use the archival data directly by the Indian astronomers.
- Action items: Indian groups can brainstorm and come up with new ideas / techniques which will be useful for the MWA EoR team. This will lead to natural collaboration.
- In parallel, explore possibilities of India joining MWA Phase 3 (2021 onwards).

Theoretical models

- Both countries are involved in theoretical modelling of the EoR signal and possible interpretation of the data.
- Interactions till now under the SKA umbrella.
- Explore possibilities of new projects involving expertise from both the countries.