

Cosmological HI signal extraction for HERA and SKA experiments.

21 cm emission from the Epoch of Reionization is expected to be found in a number of dedicated experiments as well as by the large-scale radio interferometric systems like SKA. However, this signal is very small in comparison with the foregrounds of a different origin, Galactic and extra galactic. Multiple systematic effects should also be taken into consideration.

The existed machinery of the component separation developed in the past can be modified with respect to the aperture synthesis nature of the EoR observations, and re-used for 21 cm signal cleaning and extraction. The prospects of using some the component separation techniques developed for the Planck experiment will be considered in this presentation.