

Proposal Abstract:

Galaxies evolve under the influence of gas flows from the intergalactic medium (IGM) through the circumgalactic medium (CGM) into their interstellar spaces. Therefore, understanding the spacial distribution of IGM and CGM with respect to the nearby galaxies is the very foundation to distinguish any possible galaxy formation and evolution scenarios. We proposed to use FAST in L-band to trace the IGM and CGM by combining with the HI data from the most sensitive interferometric telescope-MeerKAT, and found two interesting objects exhibiting extended faint structures that are not seen in the same band by MeerKAT. We now propose to enhance/expand our previous surveyed area to clarify their HI contents, and possible unknown companies.