

Proposal Abstract:

We propose to observe 10 nearby X-ray selected massive galaxy clusters to detect diffuse radio sources in these clusters. So far, only in nearly 100 clusters, diffuse radio sources have been observed, of which the origin is still under debate. Benefited from the high sensitivity and wide bandwidth, FAST can detect diffuse radio sources in galaxy clusters. These new observations will enable us to increase the number of diffuse radio sources, detect much extended structure and determine their spectral indices, which can give useful insight into the mechanism of relativistic electron acceleration.