

Proposal Abstract:

The in-depth study of Galactic nebulae will be vital for understanding the formation and evolution of stars, as well as the recycling of materials in the Galactic ISM. To achieve these goals, a combination of multi-wavelength survey data are indispensable. However, high-quality observation data in the radio wavelength for the ionized gas of many Galactic nebulae is still a major omission of multi-wavelength surveys. As a pilot study, we propose to observe the Rosette Nebula with FAST, which has already been observed by LASMOT with medium-resolution spectra. The LAMOST and FAST data will complement each other very well to better unveil the physical properties of this famous emission nebula.