Proposal Abstract:

Stellar flares are energetic magnetic activities occurring in the main-sequence stars' coronae, some of which can release energy much higher than even the most energetic solar flares. These flares emit enhanced radiation across the electromagnetic spectrum, and studying them through multi-wavelength observations can provide a more comprehensive understanding of coronal dynamics. In our recent observation campaign, we successively coordinated a wide range of ground-based and space-based telescopes and captured a superflare event from EV Lac. Almost all the equipment detected the flaring signals and FAST observations revealed many previously unreported spectral structures. We believe that further observations with FAST are required to interpret the radio emission during stellar flares and understand the origin of the peculiar spectral structures.