

**Proposal Abstract:**

One of the most important puzzles related to supernova remnants (SNRs) is the "missing" SNRs problem. Over 1000 SNRs are predicted to exist in the Galaxy. However, only less than 400 have been identified. One reason may be the low surface brightness SNRs or SNRs with small angular sizes that are difficult to detect. Recently, over 200 new SNR candidates have been discovered by sensitive radio surveys, but they have not yet been confirmed. The next crucial step is to confirm new SNRs from these candidates, for which the most sensitive radio single-dish telescope FAST provides a golden opportunity. The negative spectral index and polarized emission from non-thermal are key criteria for confirming a new SNR. Our pilot observation of FAST successfully measured non-thermal continuum emissions for SNRs, which proved the methodology and feasibility of the project. Thus, we propose observations toward all the 57 new SNR candidates in the FAST sky to identify new SNRs, requiring a total time of 70.2 hrs. Little is known about the properties of these new SNR candidates. Our proposed study will help address the nature of these sources by unveiling their unknown or poorly explored physical properties, and provide clues on the "missing" SNRs problem.