

PID:PT2022_0114

Abstract:

The high-latitude, large-diameter supernova remnant (SNR) G70.0-21.5 has been optically identified and is also visible in X-ray. However, no radio emission has been detected from this SNR yet. This is extremely unusual, because $\sim 95\%$ of all known Galactic SNRs have been detected at radio wavelengths. No detection means that its surface brightness must be very low. This may result from a very low magnetic field causing insufficient particle acceleration in the shock-front. Considering the high-sensitivity of the FAST telescope in both total intensity and polarization, we propose the FAST L-band observations to detect the radio emission from G70.0-21.5.