

PID:PT2022_0060

Abstract:

We propose to observe four long strips along the Galactic latitude in the third Galactic quadrant, covering a sky area of about 30 square degrees, in order to search for the weak HI emission features from the outskirts of the Galaxy. The observed HI data will be at least one order of magnitude more sensitive than the existing surveys of Galactic HI. With the sensitive observations, we expect to unveil the characteristics of distant neutral gas and put more strict restrictions on the Galaxy's outer boundary traced by HI.