

Proposal Abstract:

We propose to observe a good target of Carbon radio recombination lines (CRRLs) discovered in our previous FAST observations. This source presents both intense CRRLs at L band and narrow line-width, eminently suitable for measuring the Zeeman effect of CRRLs originating from dense photodissociation regions. If succeed, CRRLs will serve as a new probe of both the in situ magnetic field strength and the field direction in the Galactic interstellar medium.