PID:PT2022_0163

Abstract:

Linear polarization in the Arecibo HI absorption line survey is a new discovery, but not yet been verified. The HI linear polarization appears to be astronomical rather than instrumental, and independent verification from a telescope other than Arecibo is urgently needed. While we have obtained significant linear polarization detection of HI absorption against quasar 3C207 in our 2021 observations. Here we propose HI absorption observations against two more quasars to confirm our discovery and to test the theories of generating HI linear polarization.