Invited Lecture

FAST TELESCOPE CAPABILITIES, AND THE UPCOMING MULTI-BEAM SURVEY

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Construction of the Five Hundred Meter Aperture Spherical Telescope (FAST) was completed in September of 2016. We are currently in the commissioning stage. This talk will describe the current and planned capabilities of the telescope with a focus on observable lines and new science. The first large project is expected to being in the Fall of 2017. It will be a drift scan survey of the entire FAST sky conducted with the 19-beam receiver (1.05-1.45 GHz). The survey consists of four commensal projects (Galactic HI, Extragalactic HI, Pulsar search, and FRB search). The survey plan will be discussed, with a focus on the Galactic HI (HIFAST) project.