

Abstract Submitted
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Genesis of Radio Astronomy at BYU DANIEL BLAKLEY, Brigham Young University, DR. VICTOR MIGENES, SCOTT DANIEL, BOTH OF BYU TEAM — We are beginning a new program in state-of-the-art radio astronomy at BYU. Our first effort consists of a 4-meter radio antenna designed to image hydrogen spin-flip and maser lines within our galaxy where frequencies of interest include 1.4GHz – 1.6GHz. We employ a unique spectrometer/correlator that may be used both independently as well as in conjunction with a 5-antenna array for imaging. Our correlator/spectrometer is based upon CASPER hardware/firmware, as used at leading edge radio astronomy sites at JPL, Harvard, Deep Space Network, et al. This instrument system, to be followed by others, establishes a foundation for physics and astronomy research and teaching using state-of-the-art methods.

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