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BYU Radio Astronomy System for Imaging Galactic H1 and OH MASERs DANIEL BLAKLEY, VICTOR MIGENES, Brigham Young University — We have built a radio astronomy system initially designed to image galactic H1 (Hydrogen Spin-Flip) [at 1.42 GHz] and OH MASERS [1.66 GHz] in star forming regions. Initial system architecture includes one 4-meter dish antenna, 0.38dB noise figure LNA and conventional super-heterodyne block down-conversion. Enhancements underway include baseline extensions for these wavelengths, CASPER based digital correlation / spectrometer design activity including Linux server, additional imaging wavelengths, rubidium clocks, and lock-in amplifiers.

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