Abstract Submitted for the 4CF13 Meeting of The American Physical Society

Seeing the Cosmos at 1440 MHz GREGORY ERICKSON, Utah State University — Hydrogen is the most plentiful element in the universe. Relaxation of energetic excited states of H emit light; the most intense emission is at a wavelength of 21 cm. This wavelength is much too long for detection in the visible part of the spectrum, so a radio telescope must be used to study these emissions. For this reason, construction and troubleshooting of a radio telescope is underway at Utah State University to study the universe at this 1440 MHz frequency. We present the design of the instrument, along with a status report of its construction and testing. Once the telescope is fully functional, a map of the sky will be acquired to determine the accuracy of the instrument and other experiments can then be underway.

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Date submitted: 20 Sep 2013

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