INITIAL PROFILE MEASUREMENTS FROM THE HIGH-RESOLUTION ECE HETERODYNE SYSTEM ON ALCATOR C-MOD – P. Phillips, R. Chatterjee, Fusion Research Center, Uinv. of Texas, J. Heard, C. Watts, Auburn Univ., A. Hubbard, PSFC, MIT.

A heterodyne radiometer (234-306 *GHz*) to measure second harmonic ECE is now operational on Alcator CMOD. It has a large number (32) of closely spaced channels (7*mm*) focused with a high-resolution mirror system. This diagnostic provides detailed T_e profile measurements (plasma center to edge at 5.4*T*) with sample rates up to 500 *kHz*. An additional set of channels can be configured with a set of narrow filters to investigate temperature fluctuations. Initial measurements of temperature profiles, gradients, and fluctuation spectra from this system will be reported.