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Non-localized waves in a magnetized argon plasma column[1] A. DUBOIS, A. EADON, E. THOMAS, Auburn University — The Auburn Linear EXperiment for Instability Studies (ALEXIS), a 170 cm long, 10 cm diameter plasma column, has been used for studies of sheared flows in plasmas. These flows play an important role in plasma stability and have led to observations of spatially localized ion cyclotron waves. In new experiments reported in this presentation, observations have been made of non-localized, low frequency waves in Argon plasmas. These waves are observed to extend over the entire radius of the column and vary with neutral gas pressure and magnetic field strength. Probe measurements of plasma parameters, such as plasma potential, density, and electron temperature, in various magnetic field strengths, will be presented. Initial data suggests these low frequency waves are driven by gradients in the density profile.

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