

Abstract Submitted
for the DPP05 Meeting of
The American Physical Society

Measurements of wave fields and density profiles in a non uniform helicon plasma CHARLES A. LEE, DAN BERISFORD, ROGER D. BENGTSON, University of Texas at Austin — We present local measurements of wave fields and electron density in a non uniform helicon plasma. We also present the design of new Langmuir and magnetic probes used to collect both axial and radial measurements in the long, cylindrical geometry of this helicon experiment. This experimental data will be used as input to models currently in development of power absorption mechanisms in a plasma using a helicon source. Our primary motivation is to compare the wave structure and damping of the electromagnetic waves with the models.

Roger Bengtson
University of Texas at Austin

Date submitted: 13 Sep 2005

Electronic form version 1.4