

Abstract Submitted
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Irvine FRC Plasma Characterization and Upgrades E.H. TRASK, E.P. GARATE, W.S. HARRIS, W.W. HEIDBRINK, A. VAN DRIE, UC Irvine — Reversed fields of ~ 100 Gauss have been observed. New three dimensional magnetic probe arrays aid us in analyzing the structure of our fields throughout the formation and evolution of our field reversed configuration. Plasma densities of $2 \times 10^{13} \text{ cm}^{-3}$ and temperatures of ~ 2 eV have been observed with a triple probe diagnostic. Confirmation of the plasma density is being tested with a 30 GHz interferometer. Extensive work has been done to increase both the number of channels in our data acquisition system as well as the sensitivity and reliability of our measurements. We will provide an overview of our current acquisition system as well as planned upgrades.

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