

Abstract Submitted
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Results from the Alcator C-Mod Polarimeter Prototype and Plans for an FIR System¹ K. SMITH, J. IRBY, R. LECCACORVI, E. MARMAR, R. MURRAY, R. VIEIRA, MIT Plasma Science and Fusion Center — A single chord CO₂ polarimeter channel has been installed on the existing Two-Color Interferometer (TCI) on Alcator C-Mod. The measured rotation ranged from 0.1-0.3 degrees in magnitude depending on plasma density, current, and configuration. Empirical results are comparable to predicted values from model density profiles and Efit reconstructions. Experimental techniques developed to optimize signal quality and minimize drifts will be discussed. This work is in support of an FIR system with poloidally viewing chords to be installed on C-Mod in FY08. Some aspects of the FIR design will also be discussed.

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Kelly Smith
Alcator C-Mod

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