

Abstract Submitted  
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**Upgrades to the C-Mod FIR Polarimeter**<sup>1</sup> SAMEER ABRAHAM, JIM IRBY, REICH WATTERSON, RUI VIEIRA, RICK LECCACORVI, WILLIAM PARKIN, RICK MURRAY, EARL MARMAR, Massachusetts Inst of Tech-MIT — The 3-Chord FIR Polarimeter presently deployed on C-Mod is capable of responding to both fast changes in the plasma equilibrium and high frequency fluctuations. Two FIR lasers locked together with a slight frequency offset provide a signal IF at 4 MHz, which allows for the fast response of the system. Recently implemented upgrades including relocation of the laser table from the C-Mod experimental cell to a more shielded location, the design and installation of a humidity controlled beam-line to convey the FIR beams across the cell, and improved collimation optics will be discussed. Results from initial testing of the system during C-Mod operation, as well as fluctuation data from the most recent and previous campaigns will be presented and compared.

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