

Abstract Submitted
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Development of Absolute Calibration of the Phase Contrast Imaging Diagnostic and Experimental Tests in Alcator C-Mod¹ N. TSUJII, M. PORKOLAB, E.M. EDLUND, L. LIN, MIT Plasma Science and Fusion Center — The Phase Contrast Imaging (PCI) system in Alcator C-Mod is used to measure density perturbations from MHD modes, turbulence and RF waves. Recently, an absolutely calibrated system has been installed. This system consists of a set of transducers which cover frequency from 30 kHz to 200 kHz, and wavenumber from 5.5 cm^{-1} to 36.6 cm^{-1} . The amplitude and phase of the transducer wavefronts are measured using a calibrated microphone. We will present the system design and modeling of this calibration system. Initial results, including a comparison with experimental measurements will also be discussed, if available.

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