$m = 1, n = 1$ Oscillations Following the Injection of a Fuel Pellet on the Alcator C Tokamak

J. Parker*, M. Greenwald, R. Petraso, R. Granetz, C. Gomez
Plasma Fusion Center, Massachusetts Institute of Technology
Cambridge, MA 02139

Abstract

Immediately following the injection of a fuel pellet, strong $m = 1, n = 1$ oscillations of the soft X-ray signals are sometimes observed. Measurements of the electron temperature during this period indicate that the X-ray fluctuations cannot be accounted for by temperature variations. This implies that the densities must vary. Experimental data and computer modeling support the conclusion that a coherent fluctuation of the electron/proton density and of a light impurity can account for the measured results.