

Abstract Submitted  
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**Results From Stereoscopic Imaging of the Ablation of Injected Li Pellets in the Alcator C-Mod Tokamak.**<sup>1</sup> B. BOSE, E. MARMAR, PSFC, D. MIKKELSEN, PPPL, M. GREENWALD, PSFC, S. ZWEBEN, PPPL — Using an ultra high speed CCD camera, (frame rate up to 500 kHz) and a stereoscopic imaging system the detailed three dimensional evolution of striations formed in lithium plasma during the ablation of injected lithium pellets has been recorded on the Alcator C-Mod tokamak. The striations move primarily in the poloidal direction during the first 10  $\mu$ s after their formation and show distinctly different behaviors in ohmic L-mode plasmas and ICRH heated H-mode plasmas. During ohmic L-mode plasmas the direction in which the striations are emitted oscillates from the positive to negative ion diamagnetic direction on a length scale of 10-20 ion gyro radii, and they move with speeds of up to 5 km/s. On the other hand, during ICRH heated H-mode plasmas the striations show a distinct propensity to be emitted in the negative ion diamagnetic direction, and again move with speeds of up to 5 km/s. The measured characteristics of the striations will be compared with the theoretical predictions of Parks' striation theory [1]. In addition we are exploring possible correlations between striation characteristics and properties of self-generated zonal flows within the plasma. [1] Parks PB 1996 Plasma Phys, Contrl. Fusion **38** 571

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