

Abstract Submitted
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Hybrid simulations for magnetized fast ignition targets and analyzing cone-wire experiments¹ DAVID LARSON, MAX TABAK, TAMMY MA, LLNL — The 2D/3D hybrid plasma simulation code Zuma is used to analyze the advantages of imposing a magnetic field in order to enhance the transport of energetic electrons from the source region to the dense fuel assembly. Results from a variety of target and cone configurations will be presented. Zuma also calculates the $K\alpha$ production detected in experiments using cone-wire targets. Image analysis combined with simulation yields information about the conversion efficiency and transport characteristics of the hot electrons. Results from a spectrum of hot electron energy distributions will be presented and compared to experimental data.

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David Larson
LLNL

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