

Abstract Submitted  
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**LSP modeling of fast electron transport and K-shell x-ray production in multiple-layer solid targets**<sup>1</sup> H.K. CHUNG, M.S. WEI, B. WEST-OVER, D.P. HIGGINSON, B.S. PARADKAR, F.N. BEG, University of California, San Diego, K.U. AKLI, R.B. STEPHENS, General Atomics, T. MA, P.K. PATEL, M.H. KEY, H.S. MCLEAN, Lawrence Livermore National Laboratory, J. MYATT, LLE, University of Rochester — Understanding of fast electrons transport is crucial for Fast Ignition of Inertial Confinement Fusion. In experiments, transport of high intensity laser produced electrons is generally characterized by measuring fast electron produced K-shell photons using x-ray spectroscopic technique. Results from recent experiments performed at the Titan laser show that Ag  $K\alpha$  yield is insensitive to the buried depth in Al/Cu/Al/Ag/Al targets [1]. We have performed a series of 2D hybrid/PIC simulations using LSP code to model fast electron transport and  $K\alpha$  production in such targets to study underlying physics. The details of simulation results along with comparison with experimental data will be presented. [1] D.P. Higginson et al., this conference.

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