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Bremsstrahlung Measurements of the Properties of Laser-Generated Hot Electrons for Fast Ignition[1] CLIFF CHEN, LLNL, B. WESTOVER, F.N. BEG, UCSD, J.R. DAVIES, Instituto Superior Technico, R. FEDOSJEVS, University of Alberta, R.R. FREEMAN, OSU, H. FRIESEN, University of Alberta, M.H. KEY, LLNL, K. LI, Instituto Superior Technico, A. LINK, OSU, H. MCLEAN, LLNL, A. MORACE, University of Milan, V. OVCHINNIKOV, OSU, P.K. PATEL, Y. PING, LLNL, H. SAWADA, A. SOROKOVIKOVA, UCSD, R. STEPHENS, General Atomis, M. STREETER, Imperial College London, L. VAN WOERKOM, D. WERTEPNY, OSU, S.C. WILKS, LLNL — The laser to hot electron coupling efficiency, divergence angle, and spectrum are the key parameters for evaluating whether a compressed fusion capsule will ignite under the Fast Ignition scheme for Inertial Confinement Fusion. These properties were studied on the Titan laser (1054 nm, 150 J, 0.7 ps, 10^{20} W/cm^2) at LLNL using an array of absolutely calibrated Bremsstrahlung spectrometers (differential sensitivity up to 700 keV) measuring emission from planar multilayer foil and cone-foil targets. A HOPG crystal spectrometer was also used to measure the line emission from buried flours. The electron transport and x-ray emission is modeled with the Monte Carlo code ITS 3.0 and the hybrid-PIC code LSP LLNL-ABS-45809

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