

Abstract Submitted
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Hot electron measurements on NIF: energetics and preheat L. DIVOL, LLNL, E. DEWALD, C. THOMAS, D. STROZZI, S. HUNTER, D. HEY, P. MICHEL, R. TOWN, N. MEEZAN, D. CALLAHAN, J. MOODY, L.J. SUTER, S.H. GLENZER — On NIF, the time-integrated FFLEX broadband spectrometer measures Bremsstrahlung hard X-rays emitted in the hohlraum wall by energetic electrons created inside the hohlraum. The hot electron spectrum inferred from FFLEX measurements shows 2 distinct components for most gasfilled hohlraums. A low temperature part ($T_{hot} \sim 20$ keV) can be related to the total amount of stimulated Raman backscatter (SRS) and this allows us to reconcile measurements of the energy balance of gas filled hohlraum when the frequency of beam cones was changed. The higher energy component ($T_{hot} \sim 40$ -50 keV) will be discussed in terms of preheat. This work was performed under the auspices of the U.S. Department of Energy by Lawrence Livermore National Laboratory under Contract DE-AC52-07NA27344.

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