Abstract Submitted
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Laser-plasma interaction analyses of National Ignition Campaign energetics experiments[1] D.E. HINKEL, C.H. STILL, A.B. LANGDON, E.A. WILLIAMS, Lawrence Livermore National Laboratory — The National Ignition Campaign is beginning a series of energetic experiments[1,2] at the National Ignition Facility (NIF), to be performed in the summer and fall of 2009. These experiments will test our understanding of, and our ability to, simulate laser-plasma interactions under NIF-like conditions. To this end, we will perform pF3D[3] simulations of beam propagation of energetics campaign targets. Reflectivity levels and spectra, images of the scattered light angular distribution, and hot electron estimates will be presented and compared to experimental results. Modification of the energy deposition by laser-plasma interactions, and the impact on symmetry, will also be presented. 1. S. H. Glenzer et al., this meeting. 2. N. B. Meezan et al., this meeting. 3. R. L. Berger, C. H. Still, E. A. Williams, and A. B Langdon, Phys. Plasmas 5, 4337 (1998); C. H. Still, R. L. Berger, A. B. Langdon, D. E. Hinkel, L. J. Suter, and E. A. Williams, Phys. Plasmas 7, 2023 (2000).

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