Abstract Submitted
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The Hohlraum Energetics experimental campaign on the National Ignition Facility[1] S. GLENZER, J. ATHERTON, R. BERGER, E. DEWALD, L. DIVOL, S. DIXIT, E. DZENITIS, D. HINKEL, D. CALLAHAN, D. KALANTAR, LLNL, J. KLINE, G. KYRALLA, LANL, O. LANDEN, S. LEPAPE, B. MACGOWAN, N. MEEZAN, P. MICHEL, J. MOODY, E. MOSES, L. SUTER, R. WALLACE, K. WIDMANN, LLNL, NIC EXPERIMENTAL TEAM, NIC TARGET FABRICATION TEAM — We will review progress in performing the hohlraum energetics experiments on the National Ignition Facility. The experiments are designed to first activate target diagnostics and to demonstrate target experiments with cryogenic targets. In particular, a series of hohlraum and gas-filled target shots will be fielded to demonstrate performance of the absolutely calibrated soft x-ray spectrometer, Dante, the laser backscatter suite of diagnostics, i.e., the full aperture backscatter station (FABS) and Near Backscatter Imager (NBI) on two cones of the 48 quads of beams, and the absolutely calibrated hard x-ray bremsstrahlung detector, FFLEX. The campaign is designed to demonstrate laser beam intensity and laser conditioning to efficiently heat ignition hohlraums to radiation temperatures required to drive ignition capsules with laser energies in the range of 1-1.5 MJ. In this talk, we will discuss progress towards fielding this campaign on the National Ignition Facility and describe our approach for selecting the radiation temperature for ignition hohlraums.

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S. H. Glenzer
Lawrence Livermore National Laboratory

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