

Abstract Submitted
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The National Ignition Facility (NIF) as a User Facility CHRISTOPHER KEANE, Lawrence Livermore National Laboratory, NIF TEAM — The National Ignition Facility (NIF) has made significant progress towards operation as a user facility. Through June 2013, NIF conducted over 1200 experiments in support of ICF, HED science, and development of facility capabilities. The NIF laser has met or achieved all specifications and a wide variety of diagnostic and target fabrication capabilities are in place. A NIF User Group and associated Executive Board have been formed. Two User Group meetings have been conducted since formation of the User Group. NIF experiments in fundamental science have provided important new results. NIF ramp compression experiments have been conducted using diamond and iron, with EOS results obtained at pressures up to approximately 50 Mbar and 8 Mbar, respectively. Initial experiments in supernova hydrodynamics, the fundamental physics of the Rayleigh-Taylor instability, and equation of state in the Gbar pressure regime have also been conducted. This presentation will discuss the fundamental science program at NIF, including the proposal solicitation and scientific review processes and other aspects of user facility operation. *This work was performed under the auspices of the Lawrence Livermore National Security, LLC, (LLNS) under Contract No. DE-AC52-07NA27344.

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