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The National Ignition Facility (NIF) as a User Facility¹ CHRISTO-PHER KEANE, LLNL, AND THE NIF/NIC TEAM — The 192-beam National Ignition Facility (NIF) at LLNL, operational since March 2009, is conducting experiments in ICF ignition and other scientific areas. The NIF ignition program is conducted by the National Ignition Campaign (NIC). In addition to execution of the ignition program, the NIC is providing the necessary infrastructure for operation of NIF as a user facility open to both US and international scientists. NIF has made significant progress towards operation as a user facility. The NIF laser has demonstrated the necessary performance, including energy, power, precision, and reproducibility, to support NIC and other experiments. NIF has demonstrated full energy and power (1.8 MJ, 500 TW) operation at 0.35- μ m. Over 50 diagnostics are operational, and a broad range of target fabrication capabilities is in place. Initial experiments by university users and other scientists external to the National Nuclear Security Administration (NNSA) national laboratory system have been conducted, and additional experiments developed by the broader user community are in process and planned. A governance model has been established, and a NIF User Group has been formed. This presentation will discuss implementation of NIF as a user facility, with emphasis on activities at NIF in fundamental science and other areas carried out in addition to the NIC.

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