

ADVANCE OF INERTIAL CONFINEMENT FUSION PROGRAM IN CHINA

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The goal of Inertial confinement fusion research in China is towards demonstration of ignition and DT fuel burn. Laser facilities of Shenguang series (SG-IIU, SG-IIIP and SG-III) are serving for target physics research. SG-III is of capability to output maximal energy of 400kJ for third harmonic with 48 beams and is available to conduct target physics experiment prior to ignition. The new-type target including the spherical hohlraum with six LEHs of octahedral symmetry and the layered DT fuel capsule of hybrid-drive pressurized shock ignition is investigated and designed, and experiments will be performed on SG-III. The target for fast ignition is designed and experiments will be conducted on the SG-IIU with output energy of ~30kJ for third harmonic coupled with PW laser facility. In this report, the latest advance of the ICF program in China will be presented.