

Abstract Submitted
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Metrics for comparing drive on the capsule for indirect drive implosions on NIF¹ DEBRA CALLAHAN, OMAR HURRICANE, JOHN MOODY, LAURA BERZAK HOPKINS, LAURENT DIVOL, TILO DOEPPNER, EDUARD DEWALD, DENISE HINKEL, SHAHAB KHAN, ANDREA KRITCHER, SEBASTIEN LEPAPE, TAMMY MA, NATHAN MEEZAN, JOSEPH RALPH, STEVEN ROSS, LLNL — Radiation drive on the capsule is an important parameter in ICF because it determines the implosion velocity. For indirect drive, the effective capsule drive is a combination of hohlraum and capsule physics. The hohlraum converts the laser energy into xrays both flux and spectrum. The xray drive is a function of the hohlraum size, material, and hohlraum fill in addition to being a function of the laser power and energy. The timing of the drive with respect to the capsule implosion trajectory plays a role in the way in the way the capsule absorbs the energy [1] as does the choice of ablator material and capsule dopant. In this presentation, we will look at trends in the data from both hohlraum (Dante, SXI) and capsule diagnostics (bangtime, capsule xray yield) as a method for comparing the drive on the capsule for a variety of designs. [1] O. A. Hurricane, et al, this meeting

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