

Abstract Submitted
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Simulation of Direct Drive Targets on Omega and NIF¹ M.J. SCHMITT, N.S. KRASHENINNIKOVA, P. HAKEL, P.A. BRADLEY, I.L. TREGILLIS, J.A. BAUMGAERTEL, J.A. COBBLE, S.C. HSU, G.A. KYRALA, T.J. MURPHY, R.C. SHAH, Los Alamos National Laboratory, M. BARRIOS, S.P. REGAN, University of Rochester Laboratory for Laser Energetics — Simulations have been performed of direct-drive gas-filled CH capsules to examine the temperature dependence of the inner surface of the capsule where mix occurs. Various spectral tracers, doped into the inner layer of the capsule, are examined for their effect on capsule implosion characteristics and their ability to provide spectral signatures that can be used to infer the location, temperature and electron density of the mix region of the capsule. Simulations results will be shown including the effect of preheat and mix on heating of the shell near the gas-shell interface.

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