

Abstract Submitted  
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**Monoenergetic Proton Radiography Studies of Matter and Field Distributions in Cone-in-Shell Capsule Implosions** J.R. RYGG, F.H. SEGUIN, C.K. LI, J.A. FRENJE, R.D. PETRASSO, MIT PSFC, R. BETTI, D.D. MEYERHOFER, C. STOEKL, W. THEOBALD, UR LLE — The matter and electromagnetic (E/B) field distributions in inertial confinement fusion implosions have been studied for the first time using monoenergetic proton radiography. Time-gated observations of the deflection and downshift of 14.7-MeV  $D^3He$  protons passing through implosions of cone-in-shell capsules were used to measure megagauss magnetic fields with complex topology in the capsule corona, areal densities in the capsule, and substantial blowoff of cone material. This work was supported by the Univ. of Rochester Fusion Science Center (Contract 412761-G).

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