

Abstract Submitted
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Simulations of the “tent” and its signatures in NIF ignition implosions¹ B.A. HAMMEL, R. TOMMASINI, H.A. SCOTT, V. SMALYUK, Lawrence Livermore National Laboratory — NIF capsules are supported in the hohlraum by two thin (~ 50 nm) Formvar films (“tent”). We report on highly-resolved Hydra simulations of the perturbation that develops on the capsule as a result of this support geometry. The simulations indicate that details of the geometry (e.g. the departure angle of the tent from the capsule surface) are important in determining the size of the final capsule areal density perturbation. Simulated diagnostic signatures of the capsule perturbation, including “in-flight” radiographs and the shape of the x-ray emission from the compressed core are in general agreement with experiments. We are designing dedicated measurements to fully validate the simulations.

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