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Hohlraum Simulations for Synergy Capsules S.R. GOLDMAN, N.M. HOFFMAN, G.A. KYRALA, D.C. WILSON, Los Alamos National Laboratory — The use of a single capsule implosion within a hohlraum to provide information on both the asymmetry of the radiation drive impinging on the capsule and the total energy absorbed by it has led to the concept of experiments with “synergy” capsules.¹ We present simulations for planned shots at Omega with hohlraum drive approximating the first 6 ns of the actual NIF ignition drive and surrogate capsules for the NIF ignition capsule. The hohlraum modeling can assess the effects of hohlraum gas fill, laser timing variations and beam pointings. In addition to its immediate design use, it should be useful in validating both the predictive capability for observed synergy capsule responses and the modeling of the initial stage of the NIF ignition process.

¹N. M. Hoffman, D. C. Wilson, and G. A. Kyrala, 2006 High-Temperature Diagnostics Conference, May 2006, Williamsburg, VA USA, to appear in *Rev Sci Inst.* **77** (2006)

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