Analysis Of Wetted-Foam ICF Capsule Perormance [1] R. PETERSON, R. OLSON, A. ZYLSTRA, B. HAINES, A. YI, P. BRADLEY, L. YIN, R. LEEPER, J. KLINE, Los Alamos Natl Lab — The performance of wetted-foam ICF capsules is investigated with the RAGE Eulerian radiation-hydrodynamics computer code. We are developing an experimental platform on NIF that employs a wetted foam liquid DT fuel layer ICF capsules.[2,3] By varying the capsule temperature, the vapor density in the capsule can be prescribed, and the hot spot convergence ratio (CR) of the capsule implosion can be controlled. This allows us to investigate the fidelity of RAGE in modeling of capsule implosions as the value of CR is varied. In the NIF experiments, CR can be varied from 12 to 25. This presentation will cover simulations with RAGE of three NIF shots performed in 2016; a DD and a DT liquid fuel shot with CR=14 and a DT shot with CR=16. It will also discuss analysis of future experiments. [1]This work was performed under auspices of the U. S. DOE by LANL. [2] R.E. Olson, et al., J. Phys. Conf. Ser., **717**, 012042 (2016). [3] R.E. Olson and R. J. Leeper, Phys. Plasmas **20**, 092705 (2013).

Robert Peterson
Los Alamos Natl Lab

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