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Control of symmetry in Be implosions using a large Case to Capsule ratio. GEORGE KYRALA, J. KLINE, A. YI, E. LOOMIS, A. SIMAKOV, D. WILSON, Los Alamos National Laboratory, J. RALPH, R. RYGG, D. STROZZI, Lawrence Livermore National Laboratory, G AK, @lanl.gov —

1. Tuning implosion symmetry in indirectly driven spherical capsules has been usually achieved by modifying the inner to outer beam powers inside a hohlraum. This has been done either by changing the wavelength difference between the beams in a gas filled hohlraum leading to cross beam energy transfer between the beams (CBET) , or by varying the inner to outer beam power ratio directly in low-density filled cylindrical hohlraums that permit much lower CBET. Symmetry had shown a large sensitivity to the power ratio of the inner to the outer beam power, partly due to the interaction of the inner beams with the ablated capsule material. To reduce the effect of the capsule ablation on the propagation of the inner laser beams, a larger ratio of the hohraum inner radius to the capsule outer radius has been investigated. This presentation will focus on the results of a series of experiments that monitored the symmetry of the imploding capsule shell as well as the later x-ray emission from the imploded core. We will compare to predictions and post shot calculations.

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