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The effect of drive symmetry swings on imploded cores of ignition targets JOHN EDWARDS, DEBBIE CALLAHAN, OGGIE JONES, SHON PRIS-BREY, JOSE MILOVICH, DON MEEKER, DAN KALANTAR, BOB TURNER, NOBUHIKO IZUMI, BOB KIRKWOOD, Lawrence Livermore National Laboratory — Achieving conditions for ignition by compressing a capsule containing DT requires a high degree of drive symmetry, $< 1\%$ integrated in time. In the case of indirect drive this translates to obtaining sufficiently uniform X-ray deposition over the surface of the capsule, leading to a set of requirements on the laser performance that include accuracy of beam pointing within the hohlraum, as well as relative timing and power between the beams. In this paper we revisit the question of how drive symmetry swings can affect the implosion for current NIF 1MJ target designs, and how these swings can come about. This work was performed under the auspices of the U.S. Department of Energy by the University of California, Lawrence Livermore National Laboratory under contract No. W-7405-Eng-48. UCRL-ABS-222989.

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