Abstract Submitted
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Laser-plasma interactions and implosion symmetry in rugby hohlraums[1] PIERRE MICHEL, LLNL, R.L. BERGER, B.F. LASINSKI, J.S. ROSS, L. DIVOL, E.A. WILLIAMS, D. MEEKER, B.A. LANGDON, H. PARK, P. AMENDT — Cross-beam energy transfer is studied in the context of "rugby"-hohlraum experiments at the Omega laser facility in FY11, in preparation for future NIF experiments. The transfer acts in opposite direction between rugby and cylinder hohlraums due to the different beam pointing geometries and flow patterns. Its interaction with backscatter is also different as both happen in similar regions inside rugby hohlraums. We will analyze the effects of non-linearities and temporal beam smoothing on energy transfer using the code pF3d. Calculations will be compared to experiments at Omega; analysis of future rugby hohlraum experiments on NIF will also be presented.

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