

Abstract Submitted  
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**Investigation of the Effects of Target Mounting in Direct-Drive Implosions on OMEGA I.V.** IGUMENSHCHEV, F.J. MARSHALL, J.A. MAROZAS, V.A. SMALYUK, R. EPSTEIN, T.J.B. COLLINS, V.N. GONCHAROV, T.C. SANGSTER, Laboratory for Laser Energetics, U. of Rochester — Target mounting can affect the performance of direct-drive-implosion experiments on OMEGA by introducing hydrodynamic perturbations and perturbations caused by the laser-light shadowing and refraction. Two target-mounting types currently employed on OMEGA, stalks (that use glue) and C-mounts (that use four spider silks and glue), have been considered. We investigate the effects of stalks, glue spots, and spider silks in planar experiments and model these experiments using the 2-D radiation hydrodynamic code *DRACO*. Detailed 2-D implosion simulations of OMEGA's warm and cryogenic targets, including the effects of stalks, glue spots, and spider silks, will be presented. This work was supported by U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-FC52-08NA28302.

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