

Abstract Submitted  
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**Time-Dependent Absorption Measurements in Direct-Drive Spherical Implosions** W. SEKA, V.N. GONCHAROV, J.A. DELETTREZ, D.H. EDGELL, I.V. IGUMENSHCHEV, R.W. SHORT, A.V. MAXIMOV, J. MYATT, R.S. CRAXTON, Laboratory for Laser Energetics, U. of Rochester — In recent time-resolved absorption measurements of direct-drive spherical implosion experiments on OMEGA, we observed higher absorption than predicted on the basis of inverse bremsstrahlung absorption during the first 100 to 200 ps of irradiation. This enhanced absorption does not result in significant differences in the overall energetics. This effect can significantly influence the first shock launched into the plasma, however, and can thus affect the outcome of implosion experiments. We are currently investigating the source of this enhanced absorption. This work was supported by the U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-FC52-92SF19460.

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