

Abstract Submitted
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Nonlocal Ion-Heat Transport in ICF Implosions S. SKUPSKY, Laboratory for Laser Energetics, U. of Rochester — During shock propagation and coalescence in the vapor region of ICF targets, the ion mean free path can become large compared to relevant spatial scale lengths and to the size of computational cells in computer models. During this time, a local treatment of heat conduction is not valid. To investigate the effect of these long mean-free-path ions, we have developed a model for nonlocal heat transport and applied it to the modeling of experiments on the OMEGA laser. A description of this model and simulation results will be discussed. This work was supported by the U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement No. DE-FC52-92SF19460.

S. Skupsky
Laboratory for Laser Energetics, U. of Rochester

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