

Abstract Submitted
for the DPP07 Meeting of
The American Physical Society

Modeling Ion Heat Transport in ICF Targets D. LI, V.N. GONCHAROV, I.V. IGUMENSHCHEV, S. SKUPSKY, Laboratory for Laser Energetics, U. of Rochester — This talk will describe the kinetic model used to treat the nonlocal ion heat flux and viscosity in ICF implosions. The model is based on the solution of a simplified Boltzman equation using the Krook approximation. Such an approach was successfully used to calculate nonlocal electron conduction.¹ The model is implemented in the 1-D hydrocode *LILAC*. The results of simulations and comparison with the experimental data will be presented. This work was supported by the U.S. Department of Energy Office of Inertial Confinement Fusion under Cooperative Agreement DE-FC52-92SF19460.

¹V. N. Goncharov, Phys. Plasmas **13**, 012702 (2006).

D. Li
Laboratory for Laser Energetics, U. of Rochester

Date submitted: 18 Jul 2007

Electronic form version 1.4