Abstract Submitted
for the DPP13 Meeting of
The American Physical Society

Effect of Nonlocal Thermal Electron Transport on the Symmetry of Polar-Drive Experiments J.A. DELETTREZ, T.J.B. COLLINS, P.B. RADHA, D.T. MICHEL, Laboratory for Laser Energetics, U. of Rochester, D. CAO, G. MOSES, U. of Wisconsin — A nonlocal, multigroup diffusion model for thermal electron transport[1] has been added to the 2-D hydrodynamic code *DRACO*. This model has been applied to simulations of polar-drive (PD) experiments on the OMEGA Laser System and the National Ignition Facility. When compared with the simulation with flux-limited diffusion transport, the nonlocal transport under the same laser illumination pattern increases the drive at the equator, resulting in an increase of the amplitude of modes two to six at end of target acceleration. The increased drive is caused by the larger heat flux at the equator than near the pole, which results from the coronal temperature being driven purposely high to compensate for the oblique illumination when using the flux-limiter model. This material is based upon work supported by the Department of Energy National Nuclear Security Administration under Award Number DE-NA0001944.

[1]G. P. Schurtz, Ph. D. Nicolaï, and M. Busquet, Phys. Plasmas **7**, 4238 (2000).

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Date submitted: 11 Jul 2013 Electronic form version 1.4