Comparison of 2-D *DRACO* Cross-Beam Energy Transfer Simulations with OMEGA and NIF Experiments J.A. MAROZAS, T.J.B. COLLINS, P.B. RADHA, D.H. EDGELL, D.H. FROULA, M. HOHENBERGER, F.J. MARSHALL, P.W. MCKENTY, D.T. MICHEL, W. SEKA, Laboratory for Laser Energetics, U. of Rochester, S. LEPAPE, A.J. MACKINNON, T. MA, LLNL — Cross-beam energy transfer (CBET) causes pump and probe laser beams to exchange energy via stimulated Brillouin scattering,[1] which increases the scattered light and redistributes absorbed laser energy. A new CBET model has been incorporated into the 2-D hydrodynamics code *DRACO*.[2] Simulations using both *LILAC* and *DRACO* agree well with OMEGA measurements when CBET is included in tandem with a nonlocal electron transport model. The polar-angle–dependent scattered-light measurement for OMEGA polar-drive (PD) experiments was reproduced using the CBET model in *DRACO*. There is an observable difference in the morphology of the imploding target on the first National Ignition Facility (NIF) PD shots. *DRACO* with the CBET model will be used to simulate the early NIF implosions. This material is based upon work supported by the Department of Energy National Nuclear Security Administration under Award Number DE-NA0001944.

[1] C. J. Randall, J. R. Albritton, and J. J. Thomson, Phys. Fluids **24**, 1474 (1981).
[2] P. B. Radha *et al.*, Phys. Plasmas **12**, 056307 (2005).

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