Application of nonlocal transport model to experiment[1] DENIS
COLOMBANT, WALLACE MANHEIMER, Naval Research Laboratory, Washington, DC — Our Krook model for nonlocal electron energy transport [1-5] has been
developed on solid theoretical grounds. The model is characterized by both some
flux limitation and some preheat as was shown for example in the calculation of
a spherical implosion [3]. In the present work, we compare results of our model
with an experiment performed at the U. of Rochester [6]. Preliminary results indicate that our Krook model does not exhibit any flux limitation for this case. The
reduction in pressure -as indicated by the use of an average flux limiter of .07 to
reproduce the experimental result at 1015 W/cm2- can be achieved by a combination of several classical effects, namely a reduction in the absorption fraction and
taking into account 2D effects. Numerical diagnostics will be presented to support
this interpretation.

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