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## **Influence of absorption by inverse-bremsstrahlung and electron heat conduction on scattering and x-ray conversion**

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After a brief overview of absorption and electronic thermal conduction models that have been integrated into the radiative-hydrodynamic code TROLL, we will underscore the benefit of using two adjustable constants,  $C_{abs}$  and  $C_{diff}$  (adjustment of the level of absorption and conduction), in the post-shot modeling of several experiments (old, NIF, OMEGA and LMJ) that provide reflectivity and x-ray conversion measurements.

The range of best values ( $C_{abs} \sim 0.5-0.6$  and  $C_{diff} < 0.8$ ) inferred from rad-hydro post-shot modeling by the code TROLL, are compatible with values originating from molecular dynamics simulations. We will show the theoretical origin of this reduction of absorption and conduction compared to usual models and the consequences on the problem of the “drive deficit” (highlighted on the NIF) in particular.