

Abstract Submitted
for the DPP10 Meeting of
The American Physical Society

Utilizing proton bang time and areal density measurements for diagnosing NIF implosions R. PETRASSO, H. RINDERKNECHT, F. SEGUIN, J. FRENJE, C. LI, A. ZYLSTRA, M. ROSENBERG, N. SINENIAN, M. MANUEL, D. CASEY, C. WAUGH, MIT, V. GLEBOV, C. STOECKL, C. SANGSTER, J. KNAUER, P. MCKENTY, R. BETTI, LLE, A. MACPHEE, A. MACKINNON, D. HICKS, J. RYGG, O. LANDEN, S. FRIEDRICH, M. MORAN, M. ECKART, LLNL — J.KILKENNY, A.NIKROO, *GA*, R.OLSON, R.LEEPEER, SNL, D.WILSON, *LANL* – In NIF D³He implosions, measurements of shock-bang time and associated areal density, including possible P₂ asymmetries, will lead to important insights for guiding the NIF-capsule-tuning campaign. In concert with simulations and essential information from other diagnostics, such as those measuring the remaining ablator mass, implosion velocity, compression-bang time, ion temperature, etc, a comprehensive understanding of these implosions can be discerned. In this presentation, we report on the status of this work, which is supported in part by US DOE, LLNL, LLE and FSC.

Chikang Li
MIT PSFC

Date submitted: 17 Jul 2010

Electronic form version 1.4