

Abstract Submitted  
for the DPP10 Meeting of  
The American Physical Society

**Results from magneto-Rayleigh-Taylor Instability Experiments on Thin Foils Driven by a 1-MA LTD<sup>1</sup>** J.C. ZIER, S.G. PATEL, A.M. STEINER, R.M. GILGENBACH, D.M. FRENCH, M.R. GOMEZ, Y.Y. LAU, University of Michigan, M.G. MAZARAKIS, M.E. CUNEO, M.R. LOPEZ, Sandia National Labs — Foils are under investigation as imploding liners for magnetized target fusion. We report our latest design and experimental progress on the magneto-Rayleigh-Taylor instability. Planar foils driven by the 1-MA LTD, MAIZE, are the dynamic loads for this investigation. Initial experiments utilized 400 nm Al foils accelerated by asymmetric placement between return current plates. Diagnostic deployment, transmission line and load hardware, and experimental progress will be presented.

<sup>1</sup>This work was supported by DoE award number DE-SC0002590, NSF award number PHY 0903340, and by US DoE through Sandia National Labs award numbers 240985 and 76822 to UM. JC Zier and SG Patel were supported by NPSC fellowships through Sandia National Labs.

J.C. Zier  
University of Michigan

Date submitted: 16 Jul 2010

Electronic form version 1.4