

Abstract Submitted  
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**Progress on Field Reversed Configuration target for Magnetized Target Fusion**<sup>1</sup> T. INTRATOR, Los Alamos Natl Lab, G.A. WURDEN, P.E. SIECK, W.J. WAGANAAR, R. OBERTO, T.D. OLSON, D. SUTHERLAND, J.H. DEGNAN, AFRL-Kirtland, E.L. RUDEN, M. DOMONKOS, P. ADAMSON, C. GRABOWSKI, SAIC-Albuquerque, D.G. GALE, W. SOMMARS, M. KOSTORA, M.H. FRESE, NumerEx, S.D. FRESE, J.F. CAMACHO, S.K. COFFEY, N.F. RODERICK, D.J. AMDAHL, P. PARKS, General Atomics, R.E. SIEMON, University of Nevada, Reno, T. AWE, A.G. LYNN, University of New Mexico, Albuquerque — We overview the experimental high density Field Reversed Configuration (FRC) approach for a LANL AFRL collaborative physics demonstration of Magnetized Target Fusion (MTF). We show some initial translation data from the Los Alamos FRC experiment FRXL that characterize the MTF translated target plasma. The conical theta coil is expected to generate toroidal magnetic field, helicity, and good curvature field lines, and should increase stability and lifetime. The suitability of the present FRXL data for MTF implosion at AFRL Kirtland will be discussed, along with the hardware, diagnostics, and pre-compression plasma formation and trapping experiments.

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