

FIELD REVERSED CONFIGURATION TARGET STATUS FOR MAGNETIZED TARGET FUSION*

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The Los Alamos National Laboratory (LANL) collaboration with Air Force Research Laboratory (AFRL) collaboration is close to a physics demonstration of compressional heating in a Magneto Inertial Fusion (MIF) plasma target. These first Magnetized Target Fusion (MTF) experiments will use solid aluminum flux compressor shells. The experimental high density Field Reversed Configuration (FRC) can be made to translate fast enough so that FRC lifetime is not an issue. We show some initial translation data from the Los Alamos FRC experiment FRXL that characterize the translated target plasma. We have taken advantage of the LANL experience so that a near duplicate of FRXL has come up in several months. The solid liner MTF is only one of several magnetized, pulsed MIF fusion schemes that are being pursued. We outline the present status of MTF including target formation, translation to a trapping region, and compression results.

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