

Abstract Submitted
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Hybrid X-pinch Experiments on a MA Linear Transformer Driver* S.G. PATEL, D.A. YAGER-ELORRIAGA, A.M. STEINER, R.M. GILGENBACH, N.M. JORDAN, D.A. CHALENSKI, Y.Y. LAU, University of Michigan — X-pinch experiments have been conducted on the Linear Transformer Driver (LTD) at the University of Michigan. The x-pinch consists of a single wire separated by conical electrodes between two current return plates. The LTD was charged to +/-70 kV resulting in approximately 0.5 MA passing through a 35 μ m Al wire. Multiple, short x-ray bursts were detected over the 400 ns current pulse. Ultimately the x-pinch will be located in parallel with a planar foil in order to backlight the Magneto-Rayleigh-Taylor instability. A smaller 100 kA driver is also in development and may be used to independently energize the x-pinch. The x-pinch chamber has been constructed and the results of these experiments will be presented.

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