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## 5P33 - Linear Transformer Driver for HEDP experiments at UC San Diego

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Linear Transformer Drivers (LTDs) are a valuable class of pulsed power generators capable of efficient energy coupling to experimental loads and high repetition rate in a compact footprint when compared to conventional Marx bank-based systems. Presented here are results of operation of an 800 kA, 150 ns LTD at UC San Diego. These engineering tests results include current and voltage waveforms for a series of shortcircuit and matched-load shots are compared with SPICE simulations and Initial experiments performed using wire-array z-pinch loads. The wire-array z-pinch experiments include multi-frame laser interferometry, x-ray spectroscopy and time-gated visible spectroscopy, XUV and optical gated imaging, and time-resolved x-ray emission measurements via filtered photodiodes

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