

Abstract Submitted
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Diagnostics for gas puff experiments on a Linear Transformer Driver (CESZAR)¹ APSARA WILLIAMS, FABIO CONTI, VLADIMIR FADEEV, JEFFREY NARKIS, GIL COLLINS², NICHOLAS AYBAR, FARHAT BEG, University of California, San Diego, UNIVERSITY OF CALIFORNIA SAN DIEGO TEAM — The CESZAR is a low inductance compact (2m diameter) pulsed-power generator designed to provide up to 1MA of current in 160ns. First experiments on the generator are carried out with a hollow single shell Ar gas puff, with the goal of measuring the energy coupling in a low inductance system. The diagnostic suite on these experiments includes filtered photodiodes, laser schlieren imaging and interferometry, spectroscopy, and time-gated XUV pinhole imaging. The temperature and density information is extracted to determine energy coupling. A comparison of experimental results with MHD modeling will be presented to show energy coupling in low inductance system.

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²GW Collins III not GW Collins II (also in the field)

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