

Abstract Submitted  
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**Density Profile of a Foil Accelerated by Laser Ablation** J.P. KNAUER, S.X. HU, V.N. GONCHAROV, D. HABERBERGER, Laboratory for Laser Energetics, U. of Rochester — An experiment to measure the density profile of a foil accelerated by laser ablation has been designed and is underway. High-density material is measured with x-ray radiography and low-density plasma is measured using 251-nm interferometry. Two-dimensional hydrodynamic simulation results from the code *DRACO* will be compared to these data. The accelerated foil is an 80- $\mu\text{m}$ -thick CH target with Ge and Si-doped layers. The incident laser is a 351-nm, 5-ns pulse with a total energy of 6.2 kJ. Si and Ti x rays are used for the radiography measurement. A 1-D image versus time data are recorded with an x-ray streak camera and 2-D image data at specific times are recorded with an x-ray framing camera using point-projection backlighting. Foil acceleration is measured with the 1-D data. This material is based upon work supported by the Department of Energy National Nuclear Security Administration under Award Number DE-NA0001944.

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