

Abstract Submitted  
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**Preliminary characterization of a laser-generated plasma sheet<sup>1</sup>**

PAUL KEITER, MATT TRANTHAM, GUY MALAMUD, SALLEE KLEIN, JEFF FEIN, JOSH DAVIS, ROBB GILLESPE, R. PAUL DRAKE, University of Michigan — A reverse shock is a shock formed when a freely expanding plasma encounters an obstacle. Reverse shocks can be generated by a blast wave propagating through a medium. They can also be found in binary star systems where the flowing gas from a companion star interacts with the accretion disk of the primary star. Previous experiments [Krauland et al 2013] created a reverse radiative shock, in which, flowing plasma, representing the flowing plasma from the secondary star, interacted with a stationary object, which represented the accretion disk. Future experiments will replace the stationary object with a flowing plasma to represent the accretion disk and create a reverse radiative shock from the interaction of two flowing plasmas. Recent experiments created a flowing sheet of plasma. We will present the experimental results, including measurements of the spatial extent, density and velocity of the flowing plasma sheet. We will also discuss the implications for future experiments.

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