

Abstract Submitted
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Proton Probing using the T-Cubed Laser PETER KORDELL, Univ of Michigan - Ann Arbor, PAUL CAMPBELL, LOUISE WILLINGALE, ANATOLY MAKSIMCHUK, KARL KRUSHELNICK, University of Michigan - Ann Arbor, ELEANOR TUBMAN, NIGEL WOOLSEY, University of York — The University of Michigan's 20 TW, 400 fs pulse T-cubed laser can produce proton beams of up to 7.2 MeV through target normal sheath acceleration. The proton flux at 4 MeV produces sufficient signal on Radiochromic Film for use as an ultrafast, electromagnetic field diagnostic. A two beam experiment has been set-up to enable co-timed, pump-probe relativistic intensity interactions. We present an evaluation of the flux, uniformity, energy and laminar flow of the proton probe for future use in imaging of a simple wire target interaction. This work was supported by the DOE (Grant No. DE-SC0012327).

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