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Proton probing using a "table-top-terawatt" laser PETER KO-RDELL, LOUISE WILLINGALE, ANATOLY MAKSIMCHUK, KARL KRUSHEL-NICK, University of Michigan, ELEANOR TUBMAN, NIGEL WOOLSEY, University of York — The Tcubed laser at the University of Michigan can provide up to 20 TW of laser power in 400 fs pulses. Proton beams of up to 4 MeV can be accelerated with a sufficient flux for measuring on radiochromic film (RCF). We use a split-beam set-up to allow two, co-timed, relativistic intensity interactions; the first to produce the proton probe beam and the second to produce the interaction of interest. Our preliminary results of proton probing of a simple wire target interaction will be presented and future plans for this experiment will also be discussed.

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