

Abstract Submitted
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Characterization of a Fusion Product Source for ICF Diagnostic Development M.J. CANAVAN, J.A. FRENJE, R. LEITER, C.K. LI, J.R. RYGG, F.H. SEGUIN, R.D. PETRASSO, MIT, S. ROBERTS, LLE, K. FLETCHER, SUNY Geneseo — Characterization of the MIT fusion product source (FPS) has been extended through experimental and computational work, furthering the usefulness of this tool for many ICF applications. Additional hardware upgrades and the testing of various components have improved and allowed great control over fusion yields. Calculations and modeling have been performed to help understand the measured yields and to accurately characterize the energy and energy variations of emergent fusion products. ICF diagnostic development has begun, including testing of CR-39 nuclear track detectors and calibration of charged particle spectrometers. This work will be extended in the future to support the development of the Magnetic Recoil Spectrometer in addition to current ICF diagnostics. This work was supported in part by LLE, LLNL, the U.S. DoE, the Univ. of Rochester, and the N.Y.State Energy Research and Development Authority.

Fredrick Seguin
MIT

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