

Abstract Submitted  
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**Modeling a Carbon Diagnostic System Using MCNPX<sup>1</sup>** S.H. FAY, C.M. KUHN, E.E. SMITH, S.L. STEPHENSON, Gettysburg College, T.C. SANGSTER, V. GLEBOV, LLE University of Rochester, S.J. PADALINO, SUNY Geneseo — Monte-Carlo N-Particle Extended (MCNPX) is currently being used to model various carbon diagnostic configurations for use at OMEGA with plans to design a similar system for the NIF. The purpose of such models is to optimize the carbon diagnostic's detection of signature products (i.e. tertiary neutrons) from a self-sustaining inertial confinement fusion (ICF) implosion. Results will be presented.

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