

Abstract Submitted  
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**Angular distribution of SRS backscatter in NIF ignition experiments**<sup>1</sup> EDWARD WILLIAMS, JOHN MOODY, PIERRE MICHEL, DENISE HINKEL, A. BRUCE LANGDON, Lawrence Livermore National Lab., STEVEN LANGER, LAURENT DIVOL — Modeling the SRS backscatter from NIF hohlraums provides a path to a better understanding of the under-dense plasma conditions created within, which have yet to be measured directly. The spatial location of SRS amplification regions influences the amount of refraction that the scattered light undergoes, and thus its angular distribution exiting the hohlraum. Here we describe how we use pF3D [R. L. Berger et al., Phys. Plasmas 5, 4337 (1998); C. H. Still et al., Phys. Plasmas 7, 2023 (2000)], SLIP [P. Michel et al., Phys. Plasmas 17, 056305 (2010)] and a simple ray-tracing application to model the near-field (angular) distribution of SRS backscatter in NIF ignition experiments. We compare these results to the measurements made by the improved time-dependent NBI (Near-Backscatter Imager) and the FABS (Full-Aperture Backscatter) diagnostics [J. D. Moody et al., Rev. Sci. Instrum. 81, 10D921 (2010)].

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