

Abstract Submitted  
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**Progress on CBET Platform at the Nike Laser**<sup>1</sup> J.L. WEAVER, NRL, P. MCKENTY, LLE/UR, J. OH, D. KEHNE, A.J. SCHMITT, S. OBENSCHAIN, V. SERLIN, NRL, R. LEHMBERG, RSI, F. TSUNG, UCLA — Cross-beam energy transport (CBET) studies are underway at the Nike krypton-fluoride (KrF) laser at NRL. This facility has unique characteristics that provide an excellent platform for CBET work - including short wavelength (248 nm), large bandwidth (1-3 THz), beam smoothing by induced spatial incoherence (ISI), and full aperture focal spot zooming. Nike's two beam arrays are widely separated (135° in azimuth) which facilitates CBET studies in a nearly opposing geometry, relevant to Polar Direct Drive implosions. Various target types are planned: planar slabs, cylindrical and spherical shells, and low-density targets. The solid targets will be used to examine gradient geometries and the latter will access larger volume, more uniform plasmas. The initial campaign is exploring changes observed by scattered light diagnostics for both beam arrays as the probe laser spectrum is modified.

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