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Charged-particle measurements of ρR symmetry at shock-bang time in NIF implosions A. ZYLSTRA, F.H. SEGUIN, C. LI, J. FRENJE, N. SINENIAN, M. ROSENBERG, H. RINDERKNECHT, M. MANUEL, M. GATU JOHNSON, R. PETRASSO, MIT, S. FRIEDRICH, P. AMENDT, R. BIONTA, D. BRADLEY, D. CALLAHAN, S. GLENN, R. HEETER, D. HICKS, N. IZUMI, O. LANDEN, R. LONDON, A. MACKINNON, N. MEEZAN, W. WEBER, LLNL, J. DELETTREZ — V. GLEBOV, P. RADHA, T. SANGSTER, *LLE*, R. OLSON, R. LEEPER, SNL, J. KLINE, G. KYRALA, D. WILSON, *LANL,* J. KILKENNY, A. NIKROO, GA, C. SANGSTER, *LLE* The Wedge Range Filter (WRF) proton spectrometer was developed for OMEGA and transferred to the NIF as a National Ignition Campaign (NIC) diagnostic. In tuning campaign implosions containing D and ^{3}He gas, the WRFs measure the spectrum of protons from D-^{3}He reactions. The energy downshift of the 14.7-MeV proton is directly related to total ρR through the plasma stopping power. WRFs fielded simultaneously on the pole and equator measure low-mode polar ρR asymmetries due to drive inhomogeneity. We find no correlation between shock ρR symmetry and x-ray self-emission symmetry near peak compression for low polar modes. Adjacent WRFs are sensitive to high-mode asymmetries due to hydro instabilities; these have not been observed. This work was supported in part by the U.S. DOE, LLNL and LLE.

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