

Abstract Submitted
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Analysis of fusion neutron spectral widths in high-foot implosions at the National Ignition Facility¹ GARY GRIM, JOSEPH CAGGIANO, DEBRA CALLAHAN, DANIEL CASEY, CHARLES CERJAN, DANIEL CLARK, DOEPPNER TILO, MARK ECKART, JOHN FIELD, Lawrence Livermore Natl Lab, LARS FRENJE, MARIA GATU-JOHNSON, Massachusetts Institute of Technology, EDWARD HARTOUNI, ROBERT HATARIK, OMAR HURRICANE, JOSEPH KILKENNY, Lawrence Livermore Natl Lab, JAMES KNAUER, Laboratory for Laser Energetics, University of Rochester, TAMMY MA, OWEN MANION, DAVID MUNRO, HYE-SOOK PARK, DANIEL SAYRE, BRIAN SPEARS, CHARLES YEAMANS, Lawrence Livermore Natl Lab — We present the latest results of thermal temperature analyses of cryogenically layered deuterium-tritium implosions at the NIF using data from the “High Foot” campaign.² Data from new analysis methods³ and interpreted in the context of new theoretical developments⁴ will be reported. These data will include DD and DT apparent ion temperatures, their uniformity with direction, inferred plasma thermal temperature, as well as the magnitude of non-thermal contributions to the spectral widths.

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²Hurricane, O. et al., Phys. Plasmas, **21** 056314 (2014)

³Hatarik R. et al., Hartouni, E. et al. these proc.

⁴Munro D. et al. and Field, J. et al. these proceedings

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