

Abstract Submitted
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Nuclear diagnostic commissioning for the National Ignition Campaign SEBASTIEN LE PAPE, Lawrence Livermore National Laboratory, A. MACKINNON, P. MCKENTY, S. CRAXTON, S. JANEZIC, T. MA, R. TOMMASINI, P. PATEL, N. IZUMI, A. NIKROO, M. HOPPE, J. CAGGIANNO, V. GLEBOV, J. FRENJE, H. HERRMANN, J. MCNANNEY, G. GRIMM, R. LEEPER, D. BLEUEL, S. FRIEDRIECH, J. KNAUER, R. PETRASSO, H. RINDERKNECHT, C. SANGSTER, J.D. KILKENNY — Nuclear diagnostics aiming at measuring neutron yield, ion temperature, neutron bang time and down scattered ratio are a main component of the National Ignition Campaign. Indeed as the neutron yield increases, neutron diagnostics will be the last ones to measure the performance of the cryogenic DT target, as X ray diagnostics become unusable due to neutron induced noise at high yield Therefore in order to commission these diagnostics, polar direct drive experiments on exploding pusher target have been taking place on the National Ignition Facility (NIF). Results of the exploding pusher performance on the NIF as well as progress on the neutron diagnostic commissioning will be presented in this talk. This work was performed under the auspices of the U.S. Department of Energy by the Lawrence Livermore National Laboratory under contract DE-AC52-07NA27344.

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