

Abstract Submitted  
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**NIF ablator characterization experiments using the OMEGA laser system** DAVID BRADLEY, DAVID BRAUN, GAIL GLENDINNING, STEVE HAAN, DAVID MUNRO, GILBERT COLLINS, PETER CELLIERS, JOHN EDWARDS, BRIAN SPEARS, Lawrence Livermore National Laboratory — The accurate characterization of ablator materials is crucial for successful ignition of indirect-drive ICF capsules. This includes, but is not limited to measurements of preheat and instability growth. The preferred ablator material for the NIF ignition campaign is Cu-doped Be. We are testing our ability to model the hydrodynamic behavior of Cu-doped Be and testing if the microstructure seeds larger than expected Rayleigh Taylor growth. To help diagnose these effects we are developing a platform to perform high growth Rayleigh Taylor experiments on Omega. This talk will present the initial results of our experiments using this platform. This work was performed under the auspices of U.S. Department of Energy by the Lawrence Livermore National Laboratory under Contract No. W-7405-Eng-48.

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