

Abstract Submitted
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NIF and Omega Laser Ramp-Compression EOS on Tantalum JON EGGERT, RAY SMITH, DAVE BRAUN, RYAN RYGG, JIM HAWRELIAK, FEDERIC COPPARI, TED PERRY, GILBERT COLLINS, LLNL — The National Ignition Facility (NIF) offers unprecedented opportunities to push the limits of condensed-matter and materials physics. By using ramp-compression techniques on NIF we will be able to generate and probe matter at very extreme compression. The first ramp-compression EOS experiments at the NIF will be performed this spring. Here we report on our results aiming for ramp-compression EOS data on tantalum to over 5 Mbar. We will also report on ramp-compression x-ray diffraction data on tantalum to over 5 Mbar taken at the Omega laser.

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