

Abstract Submitted
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Dynamic Compression Science at Sandia's Z Machine¹ JEAN-PAUL DAVIS, Sandia National Laboratories — The Z machine at Sandia National Laboratories, the worlds most powerful pulsed-power facility, has been used since 1999 to perform dynamic compression experiments on many different materials. These experiments use the high magnetic fields generated by Z to drive shockless ramp loading, impact shock loading, and, more recently, combined shock-ramp loading to investigate equations of state, phase transitions, and material strength under extreme pressure and temperature conditions. This poster will present the ramped magnetic-pressure drive concept as realized at Z, along with at least three different examples of recent results in dynamic compression science.

¹Sandia National Laboratories is a multimission laboratory managed and operated by National Technology and Engineering Solutions of Sandia LLC, a wholly owned subsidiary of Honeywell International Inc. for the U.S. Department of Energy's National Nuclear S

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