

Abstract Submitted  
for the SHOCK15 Meeting of  
The American Physical Society

**Comparison of Models for Shock Compaction of Porous Cerium Oxide** MARK SHORT, ANTHONY FREDENBURG, Los Alamos National Laboratory — Continuum engineering models are often used to describe the shock compaction of porous materials. These range in complexity and include snowplow, p-alpha and multi-phase continuum models. We will discuss the relative performance of various compaction models in a series of one- and two-dimensional validation tests that involve high explosive drive of porous cerium oxide.

Mark Short  
Los Alamos National Laboratory

Date submitted: 02 Feb 2015

Electronic form version 1.4