

Abstract Submitted
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Workflow and visual analysis for XFEL shock physics experiments using Cinema:Bandit CYNTHIA BOLME, DANIEL ORBAN, DIVYA BANESH, CAMERON TAUXE, CHRIS BIWER, AYAN BISWAS, RAMON SAAVEDRA, CHRISTINE SWEENEY, RICHARD SANDBERG, JAMES AHRENS, DAVID ROGERS, Los Alamos National Laboratory — Recent shock physics capability developments at X-ray light sources have resulted in the performance of experiments at much higher rates and with very disparate data types. The data from these experiments commonly consists of velocimetry data that provide information about bulk volumetric response of the material, X-ray diffraction data that give information about the lattice-level material changes, and metadata for the material pedigree/initial microstructure and the performance of the X-ray light source. We have developed a new computational tool and workflow to explore and visualize these data during an X-ray beamline experiment. This workflow was deployed on a recent shock physics experiment at the Linac Coherent Light Source with processed data displayed in the modular, web-based application.

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