

Abstract Submitted
for the SHOCK07 Meeting of
The American Physical Society

New Capabilities of 800 MeV Proton Radiography at Los Alamos

CYNTHIA SCHWARTZ¹, Los Alamos National Laboratory — Three new capabilities have recently been commissioned at the proton radiography facility at Los Alamos. A powder gun driver system has been installed and commissioned and a series of demonstration measurements have been completed. This powder gun is now regularly used to drive dynamic experiments. A new CMOS hybrid camera technology has been developed and fielded resulting in dramatic improvements in quantum efficiency as well as providing eight additional radiographic images per dynamic event. A proton x3 magnifier was designed, built and commissioned to provide improved radiographic resolution for 800 MeV proton radiography experiments. Details of these new capabilities will be presented along with data from recent experiments which utilized these new capabilities.

¹for the pRad Collaboration

Cynthia Schwartz
Los Alamos National Laboratory

Date submitted: 07 Mar 2007

Electronic form version 1.4