January 5, 2015

The Los Alamos Neutron Science Center (LANSCE) invites proposals for experiments to be performed at the Proton Radiography Facility (pRad), a national user facility. The proposal deadline is Feb. 6 for experiments to be carried out during Fiscal Year 2016 (Oct. 1, 2015 to Sept. 30, 2016), with consideration for extensions into FY17.

Invented at Los Alamos National Laboratory, proton radiography uses a high-energy proton beam from the LANSCE accelerator to image the properties and behavior of materials under a variety of conditions. The penetrating power of high-energy protons makes them an excellent probe of a wide range of materials under extreme pressures, strains, and strain rates.

This new capability has revolutionized dynamic materials science at the Laboratory, providing a new window for the study of shock physics, materials damage and high explosives science.
The Proton Radiography Facility is used to diagnose dynamic and static experiments in support of national and international weapons science and stockpile stewardship programs and other experiments that benefit from the unique capabilities of proton radiography.

An overview of proton radiography capabilities is on the pRad website. Detailed information about the proposal process is available here.