

# Call for Proposals: Proton Radiography FY19 at LANSCE

**Deadline: 5:00 pm (MST) Thursday, March 1, 2018**

**PAC Review: Week of March 19, 2018.**

## **Proposal Submission:**

The [Los Alamos Neutron Science Center](http://www.lanl.gov/orgs/lansce/) (LANSCE) is issuing a Call for Proposals for experiments for the <http://lansce.lanl.gov/facilities/pRad/index.php> (pRad) during Fiscal Year 2019.

The run cycle will be from **October 1, 2018 through December 18, 2018 and June 11, 2019 through September 30, 2019**. The proton radiography facility uses 800 MeV protons, provided by the LANSCE accelerator facility at Los Alamos National Laboratory (LANL), to diagnose dynamic and static experiments in support of national and international weapons science and stockpile stewardship programs and other research that benefits from the unique capabilities of proton radiography. An overview of proton radiography capabilities can be found at <http://lansce.lanl.gov/facilities/pRad/index.php>.

## **Timeline:**

**Deadline for proposals is 5 pm (MST) Thursday, March 1, 2018.** Oral presentations by the proposers to the Program Advisory Committee (PAC) will be scheduled for the week of March 19, 2018.

**The PAC will review the proposals and develop a final ranking by the beginning of May 2018.**

## **Scope:**

pRad beam production operations are fully covered by NNSA programmatic sponsors. Approximately 10% of the beam time at pRad is available for compelling scientific proposals from institutions without programmatic sponsors and proprietary work or SPP (Strategic Partnership Project) agreements. For all experiments, costs for personnel not on the pRad team and unique experimental costs, including fabrication and assembly of the experimental package, must be borne by the user.

## **Note:**

In FY'19 run cycle, the pRad facility will have high explosive, pulsed power (PHELIX) and 40mm powder gun drivers available for experiments. We anticipate that three imaging systems will be available for dynamic experiments, 1X, 3X, and 7X. If your experiment would benefit from a pre-shot sample characterization using neutron diffraction, address the requirement in your proposal. If feasible we will use the available instruments (SMARTS and HIPPO) at the Lujan Center to perform the sample characterization. See <http://lansce.lanl.gov/facilities/lujan/index.php> for instrument details.

## **Proposal Selection:**

Submitted proposals will be ranked on:

1. Programmatic relevance and impact.
2. Quality of the science being proposed
3. Quality of experiment conception, feasibility with stated resources, requested time, and readiness for pRad experiments.
4. Existence of the physical foundations for the proposed research.

## **Unclassified Proposal Submission:**

Unclassified proposals must be submitted using the LANSCE proposal submission:

<https://www.lanl.gov/orgs/lansce/> First time users: click "First-time LANSCE User, Create a new User Account". Registered users: If you have forgotten your password click on "Forgot your password" from the login screen to reset your password. Once logged in, click on "Create proposal" at the top right of the page and complete the requested information. Please contact the pRad User Office, [pRad-uo@lanl.gov](mailto:pRad-uo@lanl.gov) for assistance or if you have questions. For any U.S. Government funded submitters, the proposal must be

reviewed by the appropriate classification authority and be appropriately marked prior to submittal.

**Classified Proposals Submission:**

Unclassified versions of classified proposals must be submitted using the LANSCE proposal submission: <https://www.lanl.gov/orgs/lansce/> . Classified versions or attachments of such proposals must be sent to Alexine Salazar either electronically on the secure network ([alexine@lanl.gov](mailto:alexine@lanl.gov)) or via appropriate classified mail transmission channels. If the latter is chosen, you must contact Alexine Salazar first to ensure that proper mailing protocols are followed. To request a classified template, please contact Alexine Salazar ([alexine@lanl.gov](mailto:alexine@lanl.gov)). All classified proposals are required to have had classification levels appropriately determined and all submitted documents should be appropriately marked. For proposals containing sigma 15 or 20 information, please contact Frans Trouw by e-mail ([trouw@lanl.gov](mailto:trouw@lanl.gov)) for information on how to proceed.

**Proposal Description:**

Technical, operational, and safety risks specific associated with the proposed experiment must be identified in the proposal. Proposals must provide a detailed description of the experimental devices, the experimental configurations, beam time requested as well as estimate of feasibility in FY'19 run cycle. Good integration with theory, modeling, and validation programs (where appropriate) will improve proposal ratings.

**Technical Questions:**

It is strongly encouraged that users work with the pRad team when developing their proposals. For technical questions regarding details involved in fielding pRad experiments or in other types of experiments that could be fielded, please contact Alexander (Andy) Saunders ([asaunders@lanl.gov](mailto:asaunders@lanl.gov)). Other questions may be directed to the pRad user office ([pRad-uo@lanl.gov](mailto:pRad-uo@lanl.gov)). For information about the Proton Radiography call for proposals go to: <http://lansce.lanl.gov/users/become-a-user/proposals.php>.

**Program Advisory Committee:**

All experiments whether they are dynamic, static, classified, or unclassified will be reviewed by the Program Advisory Committee (PAC). The PAC is an advisory committee to the LANSCE User Facility Director and not a funding committee. The PAC ranking will be folded into programmatic sponsors' decision-making processes and used as a means for Laboratory management to identify potential funding. All proposals that cover work that is continuing or are an extension of work being done during FY'18 must attach either a progress report, a final shot report, or a published paper based on the results of that work.

We look forward to your submissions,

Proton Radiography User Program [pRad-uo@lanl.gov](mailto:pRad-uo@lanl.gov)