

# Call for Proposals: Proton Radiography FY20 at LANSCE

**Deadline: 5:00 pm (MST) Friday, March 8, 2019**

**PAC Review: [Week of March 18, 2019.](#)**

## **Proposal Submission:**

The [Los Alamos Neutron Science Center](#) (LANSCE) is issuing a Call for Proposals for experiments for the pRad Facility <https://lansce.lanl.gov/facilities/pRad/index.php> during Fiscal Year 2020.

The run cycle will be from **October 1, 2019 through December 20, 2019 and approximately June 17, 2020 through September 30, 2020**. 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 <https://lansce.lanl.gov/facilities/pRad/index.php>. Approximately 10% of the beam time at pRad will be available for compelling scientific proposals from institutions with no programmatic sponsor.

## **Timeline:**

**Deadline for proposals is 5 pm (MST) Friday, March 8, 2019.** Oral presentations by the proposers to the Program Advisory Committee (PAC) will be scheduled for the week of March 18, 2019.

**The PAC will review the proposals and develop a final ranking by the beginning of April 2019.**

## **Scope:**

pRad beam production operations are 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'20 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. The x7 magnifier will not be available for powder gun experiments. 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 <https://lansce.lanl.gov/facilities/lujan/index.php> for instrument details.

## **Proposal Selection:**

Submitted proposals will be ranked on:

1. Quality of the science being proposed
2. Programmatic relevance and impact
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 Experiment Management System: <https://lems.lanl.gov/login>. Users need to create an account first. If you have an account in the old LANSCE proposal portal please use the "[Forgot your Password?](#)" to reset your password and access your account in the new system.

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.

**OUO/Export Controlled Proposal Submission:**

A version of the proposal with no OUO/export controlled information must be submitted using the LANSCE Experiment Management System: <https://lems.lanl.gov/login>.

The full OUO/Export Controlled proposal needs to be submitted using the LANL File Transfer system <https://transfer.lanl.gov/> to [pRad-uo@lanl.gov](mailto:pRad-uo@lanl.gov).

**Classified Proposal Submission:**

Unclassified versions of classified proposals must be submitted using the LANSCE Experiment Management System: <https://lems.lanl.gov/login>. Classified versions or attachments of such proposals must be sent to Liz Melton either electronically on the secure network ([ejm@lanl.gov](mailto:ejm@lanl.gov)) or via appropriate classified mail transmission channels. If the latter is chosen, you must contact Liz Melton first to ensure that proper mailing protocols are followed. To request a classified template, please contact Liz Melton ([ejm@lanl.gov](mailto:ejm@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 Tamsen Schurman by e-mail ([tamsen@lanl.gov](mailto:tamsen@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'20 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 Levi Neukirch ([lneukirch@lanl.gov](mailto:lneukirch@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: <https://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'19 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)