Call for Proposals: Nuclear Science at LANSCE 2026 Run Cycle

The WNR and Lujan Center call for nuclear science proposals is now open.

Deadline: Friday, **February 20, 2026**, 5:00 pm (MDT)

The Los Alamos Neutron Science Center (LANSCE) is issuing a Call for Proposals for Nuclear Science at the Weapons Neutron Research (WNR) Facility and Manuel Jr. Lujan Scattering Center (Lujan) for the upcoming run cycle June 18 – December 21, 2026.

The WNR facility and the Lujan Center provide neutron and proton beams and can supply detector arrays for basic, applied, and defense-related research, depending on experimental requirements. Neutron beams with energies ranging from about 0.1 MeV to more than 600 MeV are produced at WNR from Target 4 (an unmoderated tungsten spallation source) using the 800 MeV proton beam from the LANSCE Linac. In the Target-2 area (Blue Room), samples can be exposed to the direct proton beam with energies up to 800 MeV. At Target 1 (Lujan Center), cold to epithermal neutrons (0.2 meV – 500 keV) are produced. Information about the Nuclear Science instruments is available on the LANSCE website: https://lansce.lanl.gov/facilities/

Timeline

- The deadline for proposal submission is **Friday, February 20, 2026, at 5:00 p.m. (MDT).**
- All non-proprietary proposals will be reviewed by the Nuclear Program Advisory Committee (NPAC) for scientific merit. The NPAC will meet in early March 2026. Nuclear science proposers are not expected to give a presentation. However, reviewers may contact PIs if there are questions about the proposals prior to the NPAC meeting.

LA-UR-26-20096

Instruments/Flight Paths Available in the Current Call for Proposals

Target 1 (Cold, Thermal, and Epithermal Neutron Source: 1 meV-500 keV)

DANCE (flight path 14) will be accepting proposals for the 2026 LANSCE run cycle, but proposers are strongly encouraged to discuss experimental conditions with the Instrument Scientist (Aaron Couture, acouture@lanl.gov) prior to preparing and submitting a proposal. The flight path will be realigned in spring 2026, which is expected to improve beam performance, but the resulting characteristics will not be measured until the 2026 run cycle.

For DICER (flight path 13), only proposals using the standard DICER configuration are encouraged to submit in the current run cycle. Proposers are strongly encouraged to consult with the Instrument Scientist (Thanos Stamatopoulos, thanos@lanl.gov) before preparing a proposal.

For flight path 12, (Anything about SPIDER, LENZ) please contact the Instrument Scientist (Sean Kuvin, kuvin@lanl.gov) before submitting proposals.

Flight Path	Description	Instrument Scientist	Email	Telephone
Flight Path 12*	General purpose, SPIDER, LENZ	Sean Kuvin	kuvin@lanl.gov	505-606-0990
Flight Path 13*	Device for Indirect Capture Experiments on Radionuclides (DICER). Neutron total cross sections and indirect capture of radionuclides.	Thanos Stamatopoulos	thanos@lanl.gov	505-500-6657 505-665-3114
Flight Path 14*	Detector for Advanced Neutron Capture Experiments (DANCE). Neutron capture cross sections on small samples of stable, rare, or radioactive nuclides and measurements of gamma-ray emission spectra	Aaron Couture	acouture@lanl.gov	505-667-1730

Target 4 (High-Energy Neutron Source: 1-600 MeV)

The available beamtime for Flight Path 90L will be very limited for the 2026 LANSCE run cycle; please contact the IS/IA (Panos Gastis, gastis@lanl.gov) before submitting proposals.

Note that on Flight Path 15L, the 90 m station can run experiments parasitically while a separate experiment is running at the 20 m station. For 90 m station experiments:

- If sole use of the 90 m station is required (with no experimental equipment upstream at the 20 m station), this must be stated in the proposal.
- Entering the 90 m station requires beam to be turned off at the 20 m station, and these beam interruptions must be considered when experiments are conducted at both stations.

Flight Path	Description	Instrument Scientist	Email	Telephone
Flight Path 90L	Fission, SPIDER, SREFT, LENZ	Panagiotis Gastis	gastis@lanl.gov	505-665-6586
Flight Path 15L	20 m and 90 m stations,neutron outputs, Chi-Nu, CoGNAC	Matthew Devlin	devlin@lanl.gov	505-665-0421
Flight Path 15R	LENZ(n,z), detector testing and characterization	Hye Young Lee	hylee@lanl.gov	505-665-7252
Flight Path 60R	General purpose, High Energy Neutron Radiography	Kranti Gunthoti	kranti@lanl.gov	505-551-4906

Target 2 (Blue Room) Proton Irradiations / Sole Use

Radiation effects, proton-induced reaction cross sections, Lead Slowing-Down Spectrometer, Proton Storage Ring beam, Linac beam (including beam energies other than 800 MeV), sole use.

Instrument Scientist:

- **Kranti Gunthoti**, kranti@lanl.gov, 505-551-4906

Proposal Submission and Selection

Proposal Submission and Required Documents:

All proposals must be submitted using the LANSCE Experiment Management System (LEMS) and include a proposal document. Please note that the proposal web-based form will be available soon for proposal submissions; read it carefully and complete all sections.

The system requires users to:

1. Create an account.
2. Complete a web-based form.
3. Upload a proposal document.

The proposal document should be formatted with fonts no smaller than 12 pt, with a maximum of five text pages plus figures and appendices. It should contain the following technical information:

1. **Research Goals**

   Provide background to place your proposal in context and describe the significance of the proposed work.

2. **Experimental Details**

   Provide enough information for the PAC to assess feasibility: what you want to measure, estimates of signal and background (including any assumptions), the total beamtime request, and justification for that beamtime (including any contingencies).

   Note: The time request must include setup and teardown. You will be expected to start setup on your first day of beam and be finished removing equipment by your last day.

3. **Equipment and Facility Needs**

   If you require specialized equipment (including user equipment shipped to LANL for the experiment), personnel expertise, or facility operations, discuss these needs. Clarify plans for equipment not provided by LANL (e.g., whether it will be shipped back to your home institution or stored at LANL for future experiments).

When submitting your requested beam days, assume WNR intends to run at approximately 4 μA at 100 pulses per second, and the Lujan Center nominally operates at 100 μA at 20 pulses per second (in 2025 run cycle, reached about 80 μA). Delivery of lower-than-nominal beam is possible during scheduled run time, so plan accordingly.

If your proposal requires specialized facility operations (e.g., Target 2 / sole use or non-standard operation of the Proton Storage Ring), be aware that the proposal will face additional scrutiny due to potential consequences (e.g., loss of beam) for other experiments.

Proposers should expect discussions regarding sample disposition and other safety-related issues as part of the proposed experiment.

With recent changes to the LANSCE cost model (see note below), external users should anticipate that on-site support from Flight Path Instrument Scientists (IS) and Instrument Assistants (IA) may be more limited than at many other user facilities. As a result, users should work closely with the corresponding Instrument Scientist well in advance to optimize their experimental setup and ensure they have sufficient independent resources and expertise to conduct their experiment successfully.

Please contact the User Program Office (lansce-user-office@lanl.gov, 505-667-6797) for assistance with the proposal process, or the Instrument Scientist for technical questions.

Note: The Department of Energy (DOE) requires a User Agreement (UA) between Los Alamos National Laboratory and the user's home institution before an experiment can be run. For a description and list of existing UAs, see:

https://lansce.lanl.gov/users/become-a-user/user-agreements.php.

If your institution does not have a valid UA in place, please contact the User Office at lansce-user-office@lanl.gov to begin the process as early as possible.

Note: The LANSCE cost model is now available at https://lansce.lanl.gov/users/become-a-user/user-agreements.php, where experiments are separated into three categories. If you have questions about which category applies to your experiment, please contact Dr. Ming Liu (mliu@lanl.gov, 505-667-7125).

Important

- All visiting U.S. citizens must register their visit **three weeks** before the scheduled experiment.
- Non-U.S. citizens must register **at least 60 days** before their visit.
- DOE requires that all personnel associated with each experiment (including citizenship) be listed in the proposal.
- DOE requires additional information to grant non-U.S. citizens access to Los Alamos National Laboratory (LANL). Foreign national visitors must have an approved visit request, present a valid passport, and provide documentation of U.S. legal status and work authorizations.

  https://www.lanl.gov/community/visitors/badging/index.php.

Program Advisory Committee Review

1. **Initial Quality Screening**

Proposals will undergo an initial quality check. Those that are complete will be sent to the Instrument Scientist (IS) for a feasibility review. Proposals that are incomplete or do not follow the guidelines will be returned for updates.

2. **Feasibility Review**

The IS will assess feasibility. If updates are needed, proposers will be given the chance to address them.

3. **NPAC Evaluation**

Complete proposals and their accompanying feasibility reviews will be forwarded to the Nuclear Program Advisory Committee (NPAC). The NPAC is an advisory committee to the LANSCE User Facility Director (LUFD), composed of technical experts in the field. It judges proposals based on these criteria (in order of importance):

• **Quality of the Science or Measurement**: What problem is being addressed? Why is the experiment proposed?

• **Impact**: How will the data be used (e.g., to meet program milestones, support graduate student or postdoctoral research, staff development)? As an NNSA-sponsored facility, NNSA priorities will be weighted more heavily, but proposals from other sponsors are also welcome.

• **Feasibility and Readiness**: Are samples and detector systems ready? Have prior experiments or measurements been performed, analyzed, and published? Are relevant calculations complete?

• **Need for LANSCE Resources**: Why can't these experiments be done elsewhere? How much beam time, staff time, etc. will be required?

The more detailed the information provided (including results from previous experiments or tests), the stronger the proposal.

4. **Ranking and Feedback**

The NPAC will provide a preliminary ranking of proposals, including recommendations on which proposals should not be awarded beam time. The LUFD and representatives from the programs sponsoring experiments at LANSCE will then finalize these rankings. NPAC

feedback will be provided to all proposals in a timely manner, well before the start of the LANSCE run cycle.

Proposal Scheduling

After the LANSCE block schedule for a run cycle is finalized, the Instrument Scientist for each flight path will combine the block schedule with the finalized rankings to develop an experimental schedule. These schedules will be communicated to experiment proposers as soon as possible so that arrangements for parts shipment, user travel, etc. can be made.

To maximize operational efficiency, feasibility, readiness, and resource usage may be weighted more heavily during proposal scheduling than during proposal review.

Final scheduling of ranked proposals depends on the feasibility of fielding the experiment within the constraints of the LANSCE operating schedule and the priority of programmatic needs. Because of the complexity of the LANSCE accelerator and experimental systems, the operating schedule may change over the course of the run cycle, and specific dates cannot be guaranteed.

In the event that proposals recommended for beam time are not executed in a given run cycle, those proposals must be resubmitted for a later run cycle.

Classified Proposals Submission

If you plan to submit a classified proposal, please contact Dr. Ming Liu (mliu@lanl.gov 505-667-7125) as early as possible to discuss how to do so.

We look forward to your submissions,
Nuclear Science User Program