

# Call for Proposals: Nuclear Science at the WNR Facility and Lujan Center

## Proposal Submission

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

Deadline: Monday, March 20, 2017, 5:00 pm (MDT).

[lansce.lanl.gov](http://lansce.lanl.gov)

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**The [Los Alamos Neutron Science Center \(LANSCE\)](http://lansce.lanl.gov) is issuing a Call for Proposals for Nuclear Science at the Weapons Neutron Research (WNR) Facility and Lujan Center for the upcoming run cycle - July – December 2017.**

The Weapons Neutron Research (WNR) and Lujan Center provide neutron and proton beams, as well as detector arrays for basic, applied, radiation effects, and defense-related research. Neutron beams with energies ranging from about 0.1 MeV to more than 600 MeV are produced in 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 cold to epithermal neutrons (1 meV - 500 keV) are produced. Information about the Nuclear Science instruments is available at [lansce.lanl.gov](http://lansce.lanl.gov).

## Timeline

The deadline for proposal submission is Monday, March 20 at 5:00pm (MDT). All non-proprietary proposals will be reviewed by the Nuclear Program Advisory Committee (NPAC). The NPAC will meet the week of April 3, during which the proposers are expected to give short presentations in person or by phone. Beam time allocation for proprietary and full cost recovery experiments on any beamline is determined on a first come, first served basis.

## Instruments/flight paths available in the current call for proposals:

### Target 1 (Thermal and Cold neutron source: 1 meV-500 KeV):

1. [Flight Path 5](#): General purpose: Ron Nelson [rnelson@lanl.gov](mailto:rnelson@lanl.gov), 505-667-7107
2. [Flight Path 12](#): General purpose: Fredrik Tovesson, [tovesson@lanl.gov](mailto:tovesson@lanl.gov), 505-665-9652
3. [Flight Path 13](#): Total Cross Sections: Paul Koehler, [koehler@lanl.gov](mailto:koehler@lanl.gov), 505-606-0743
4. [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. John Ullmann, [ullmann@lanl.gov](mailto:ullmann@lanl.gov), 505-667-2517

#### **Target 4 (High-energy neutron source: 1-600 MeV):**

1. [Flight Path 90L](#): Fission, Time-Projection Chamber (TPC): Fredrik Tovesson, [tovesson@lanl.gov](mailto:tovesson@lanl.gov), 505-665-9652
2. [Flight Path 30L](#): ICE House, single event effects, semiconductor testing and other measurements: Steve Wender, [wender@lanl.gov](mailto:wender@lanl.gov), 505-667-1344
3. [Flight Path 15L](#): 20 m and 90 m stations, neutron outputs, Chi-Nu: Matt Devlin, [devlin@lanl.gov](mailto:devlin@lanl.gov), 505-665-0421
4. [Flight Path 15R](#): General purpose, detector testing, LENZ(n,z): Nik Fotiadis, [fotia@lanl.gov](mailto:fotia@lanl.gov), 505-665-0589
5. [Flight Path 30R](#): ICE-II Single-event effects flight semiconductor testing and other measurements: Steve Wender, [wender@lanl.gov](mailto:wender@lanl.gov), 505-667-1344
6. [Flight Path 60R](#): High Energy Neutron Radiography: Ron Nelson, [rnelson@lanl.gov](mailto:rnelson@lanl.gov), 505-667-7107

#### **Target 2 (Blue Room) Proton irradiations:**

Radiation effects, isotope production, Lead Slowing-Down Spectrometer, PSR beam, Linac beam: Ron Nelson, [rnelson@lanl.gov](mailto:rnelson@lanl.gov), 505-667-7107

### **Proposal Submission and Selection**

Proposals are reviewed by flight path scientists for technical feasibility and safety issues, then reviewed for scientific merit and program relevance by the Nuclear Program Advisory Committee (NPAC).

#### **Unclassified Proposal Submission**

Unclassified proposals must be submitted using the LANSCE proposal submission system: <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 Nuclear Science User Program Office, [lansce-user-office@lanl.gov](mailto:lansce-user-office@lanl.gov), or 505-667-6797 for assistance or if you have questions.

**Important:** make sure all PIs, Co-PIs, and participants (including their citizenship) are listed in the proposal. The US Department of Energy (DOE) requires additional information to grant non-US citizens access to LANL. Foreign national visitors must have an approved visit, present a valid

passport and documentation of US legal status and work authorizations.  
(<http://www.lanl.gov/communityenvironment/visitors/badge-office.php>)

### **Classified Proposals Submission**

Unclassified versions of classified proposals must be submitted using the LANSCE proposal submission system: <https://www.lanl.gov/orgs/lansce/>. To submit a classified proposal, please contact Fredrik Tovesson ([tovesson@lanl.gov](mailto:tovesson@lanl.gov), 505-665-9652).

All classified proposals are required to have had classification levels appropriately determined and all submitted documents should be appropriately marked.

### **Neutron Radiation Effects Proposals**

When requesting access to the semiconductor irradiation and testing facilities at the ICE Houses, please specify which flight path is your first choice (ICE House or ICE-II). Note that proprietary user must also submit a proposal, though these proposals are not reviewed by the NPAC. For technical questions contact Steve Wender ([wender@lanl.gov](mailto:wender@lanl.gov), 505-667-1344). For administrative questions on industry contracts in these flight paths, please contact Tanya Herrera ([tanyah@lanl.gov](mailto:tanyah@lanl.gov), 505-667-6797).

For questions regarding full cost recovery experiments on any other flight path, please contact Fredrik Tovesson ([tovesson@lanl.gov](mailto:tovesson@lanl.gov), 505-665-9652).

### **Target 2 sole use**

Proposals for sole-use experiments on Target 2 (requiring proton beams other than 800 MeV or changes in the PSR) should be discussed with the Target-2 point of contact: Ron Nelson, [rnelson@lanl.gov](mailto:rnelson@lanl.gov), 505-667-7107.

### **Technical Questions**

For technical questions regarding details involved in fielding experiments or in other types of experiments that could be fielded, please contact Fredrik Tovesson ([tovesson@lanl.gov](mailto:tovesson@lanl.gov), 505-665-9652), the individual instrument scientists, or the User Program Office ([lansce-user-office@lanl.gov](mailto:lansce-user-office@lanl.gov), or 505-667-6797) who will then make sure you contact the expert in the area in which you are interested.

For more information about the Nuclear Science Call for Proposals go to:  
<http://lansce.lanl.gov/users/become-a-user/proposals.php>

We look forward to your submissions,  
Nuclear Science User Program  
[lansce-user-office@lanl.gov](mailto:lansce-user-office@lanl.gov)  
505-667-6797