

Call for Proposals: Nuclear Science at the WNR Facility and Lujan Center 2018 Run-Cycle

Proposal Submission

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

Deadline: Friday, March 2nd, 2018, 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 Lujan Center for the upcoming run cycle June – December 2018.**

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 <http://lansce.lanl.gov/facilities/wnr/index.php>.

Timeline

The deadline for proposal submission is Friday, March 2, 2018 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 March 19, 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: Adrian Losko, alosko@lanl.gov, 505-920-3980
2. **Flight Path 12:** General purpose: Nik Fotiadis, fotia@lanl.gov, 505-665-9652
3. **Flight Path 13:** Device for Indirect Capture Experiments on Radionuclides (DICER). Neutron total cross sections of radioactive nuclides: Paul Koehler, 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, 505-667-2517

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

1. **Flight Path 90L:** Fission, Time-Projection Chamber (TPC): Shea Mosby, smosby@lanl.gov, 505-665-5414
2. **Flight Path 30L:** ICE House, single event effects, semiconductor testing and other

- measurements: Steve Wender, 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, 505-665-0421
 4. **Flight Path 15R:** General purpose, detector testing, LENZ(n,z): Nik Fotiadis, fotia@lanl.gov, 505-665-9652
 5. **Flight Path 30R:** ICE-II Single-event effects flight semiconductor testing and other measurements: Steve Wender, wender@lanl.gov, 505-667-1344
 6. **Flight Path 60R:** High Energy Neutron Radiography: Ron Nelson, rnelson@lanl.gov, 505- 667-7107
 7. **East Port:** Neutron activation, neutron irradiation: Ron Nelson, rnelson@lanl.gov, 505-667-7107

Target 2 (Blue Room) Proton irradiations:

Radiation effects, proton-induced reaction cross sections, Lead Slowing-Down Spectrometer, PSR beam, Linac beam: Ron Nelson, 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, update your profile if applicable, 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, or 505-667-6797 for assistance or if you have questions.

Important: Make sure all PIs, Co-PIs, and participants (including citizenship) are listed in the proposal. The US Department of Energy (DOE) requires additional information to grant non-US citizens access to Los Alamos National Laboratory (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/community/visitors/badging/index.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 Alexine Salazar (alexine@lanl.gov).

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 users must also submit a proposal, though these proposals are not reviewed by the NPAC. For technical questions contact Steve Wender (wender@lanl.gov, 505-667-1344). For administrative questions on industry contracts in these flight paths, please contact Tanya Herrera (tanyah@lanl.gov, 505-667-6797).

For questions regarding full cost recovery experiments on any other flight path, please contact Eric Pitcher (pitcher@lanl.gov, 505-667-7760).

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, 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 Eric Pitcher (pitcher@lanl.gov, 505-667-7760), the individual instrument scientists, or the User Program Office (lansce-user-office@lanl.gov, or 505-667-6797) who will then refer you to the appropriate expert in your area of interest.

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