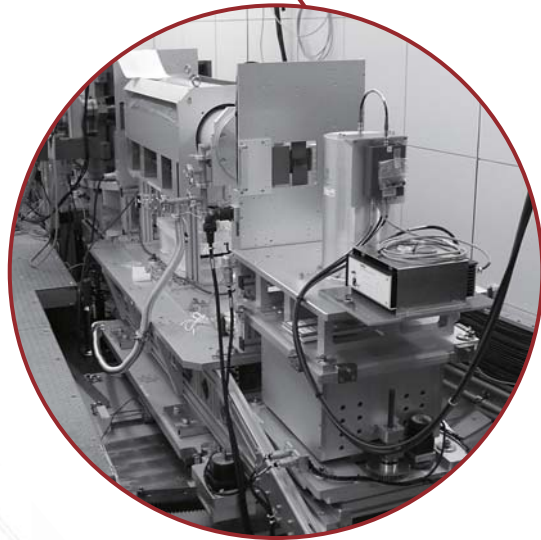
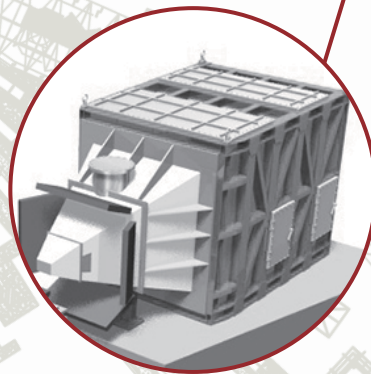


CROSS TOKAI



Specific Neutron Beam Facility at J-PARC
Registered Institution for Facilities Use Promotion

Comprehensive Research Organization for Science and Society
Research Center for Neutron Science and Technology
<http://www.cross-tokai.jp>

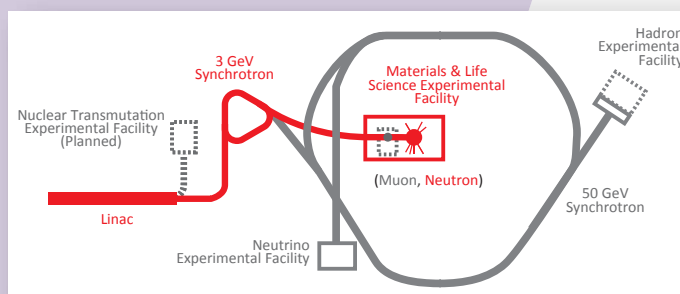


About CROSS-Tokai

April 2013

Consistent with its longstanding policy of promoting open access to major publicly-funded research facilities, the Japanese government has appointed CROSS-Tokai to administer and support user operations on the Public Beamlines at J-PARC·MLF – one of the world's leading spallation neutron sources. This appointment brings J-PARC·MLF into line with the SPring-8·SACLA synchrotron radiation and XFEL facility (Harima Science City, Hyogo) and the “K Computer” supercomputer facility (Kobe, Hyogo) where the Public Use Promotion legislation has already been successfully applied.

Located north-east of Tokyo on the Japanese Pacific coast, Tokai has been for many years a major center for nuclear science and technology and now hosts the Japan Proton Accelerator Research Complex (J-PARC). Jointly built and operated by the Japan Atomic Energy Agency (JAEA) and the High Energy Accelerator Research Organization (KEK), J-PARC is comprised of a series of world-class proton accelerators and experimental facilities that make use of the intense proton beams. At the center of these is the Materials and Life Science Experimental Facility (MLF). At full design power, the MLF will use a 1 MW pulsed proton beam to generate the world's most intense neutron and muon beams.



The “Specific Neutron Beam Facility” at J-PARC (Shown in red)

The MLF currently has 17 neutron beamlines in operation and a further three under construction or in commissioning. Six of the operating instruments have been designated as Public Beamlines within the Specific Neutron Beam Facility as defined by the Public Use Promotion legislation (See above figure). These instruments are open to local and international researchers via the Public Beamline User Program administered by CROSS-Tokai. The Public Beamlines boast a suite of instruments that deliver world-class performance across a range of scientific endeavor from fundamental research to industrial applications. As the MLF grows to full capacity, it is hoped that as many as 10 neutron instruments will be eventually supported and administered as Public Beamlines by CROSS-Tokai.

The role of CROSS-Tokai

The Public Use Promotion legislation specifies two major functions for CROSS-Tokai regarding the Public Beamlines at J-PARC·MLF: to implement and manage an open and independent proposal selection system and to provide user support to those experiments approved by this system.

CROSS-Tokai has 50 staff now in place on the Tokai site to carry out activities associated with these functions that include:

- Assessment and selection of experimental proposals to use the Public Beamlines
- Assessment and selection of proposals to build Contract Beamlines
- Facility utilization promotion through outreach activities (conferences, workshops etc.)

Importantly, with a team of 28 research and technical staff, as well as support laboratories and facilities, CROSS-Tokai is an active and productive research center for neutron science and technology.

Find out more

CROSShelp is a one-stop shop for users, potential users or, indeed, anyone seeking information about the neutron beam facilities at J-PARC·MLF. We welcome all enquiries and provide expert advice and assistance with any aspect of accessing and using J-PARC·MLF including:

- Planning an experiment - from concept to setup
- Instrument capabilities and performance - selecting the most appropriate beamline
- Proposal preparation
- Experiment support and data analysis
- Provision of other specialist information

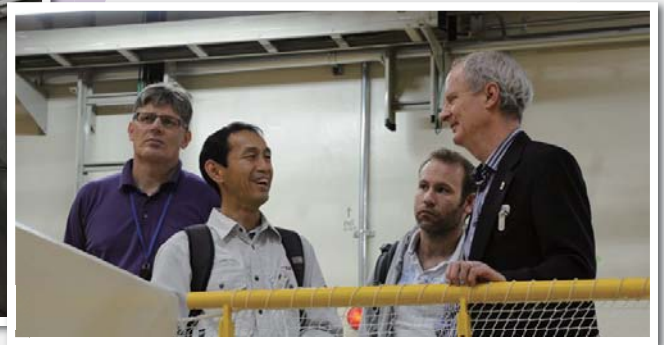
To contact us or find out more about CROSS-Tokai, please visit www.cross-tokai.jp and click on the CROSShelp icon.

CROSS-Tokai in action

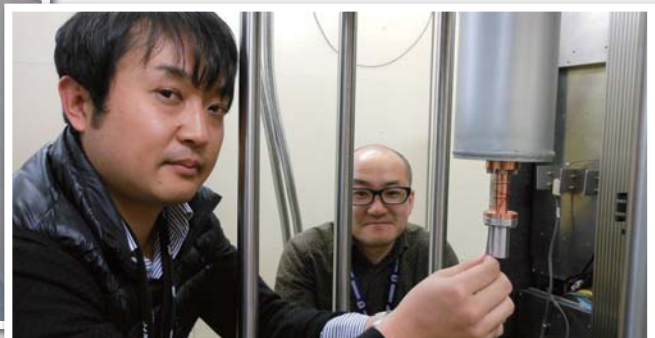
Proposal Selection



Hosting visiting delegations



User support



CROSSroads Workshops

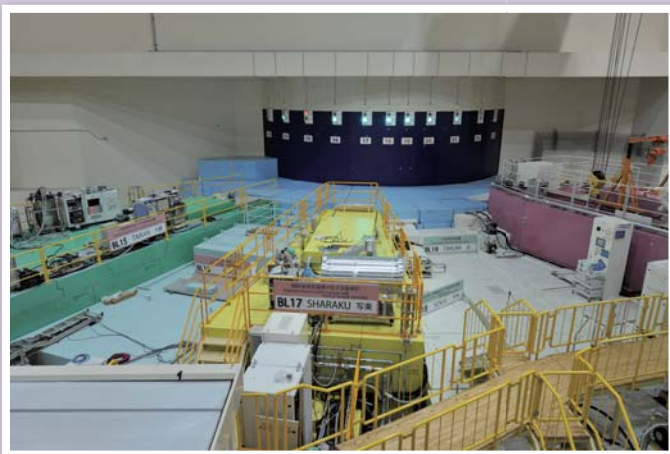


Outreach Activities (Industry seminars)



The Public Beamline at J-PARC

Experimental Hall 2



Experimental Hall 1



Proton beam

BL15 TAIKAN 大観

Small and Wide Angle Neutron Scattering Instrument



Structural analysis on the sub-nano to micron scale of soft matter, biomolecules, metals and magnetic materials

BL11 PLANET

High-Pressure Neutron Diffractometer



Structural analysis and radiography of liquids and crystalline materials under extreme pressure and temperature conditions

BL17 SHARAKU 写楽

Polarized Neutron Reflectometer



Structural analysis of surfaces and buried interfaces in functional thin film materials, biological membranes etc.

BL02 DNA

Biomolecular Dynamics Spectrometer



Measurement of atomic motion and spin dynamics (in magnetic systems) of bio-macromolecules, soft matter and functional materials

BL18 SENJU 千手

Extreme Environment Single Crystal Neutron Diffractometer



Crystal and magnetic structure analysis of functional materials

Neutron production target

BL22 (Under construction)

Energy-Resolved Neutron Imaging System



Visualization of the spatial distribution of crystal structures, nuclides and magnetic domains by neutron transmission imaging and 3D reconstruction

BL01 4SEASONS 四季

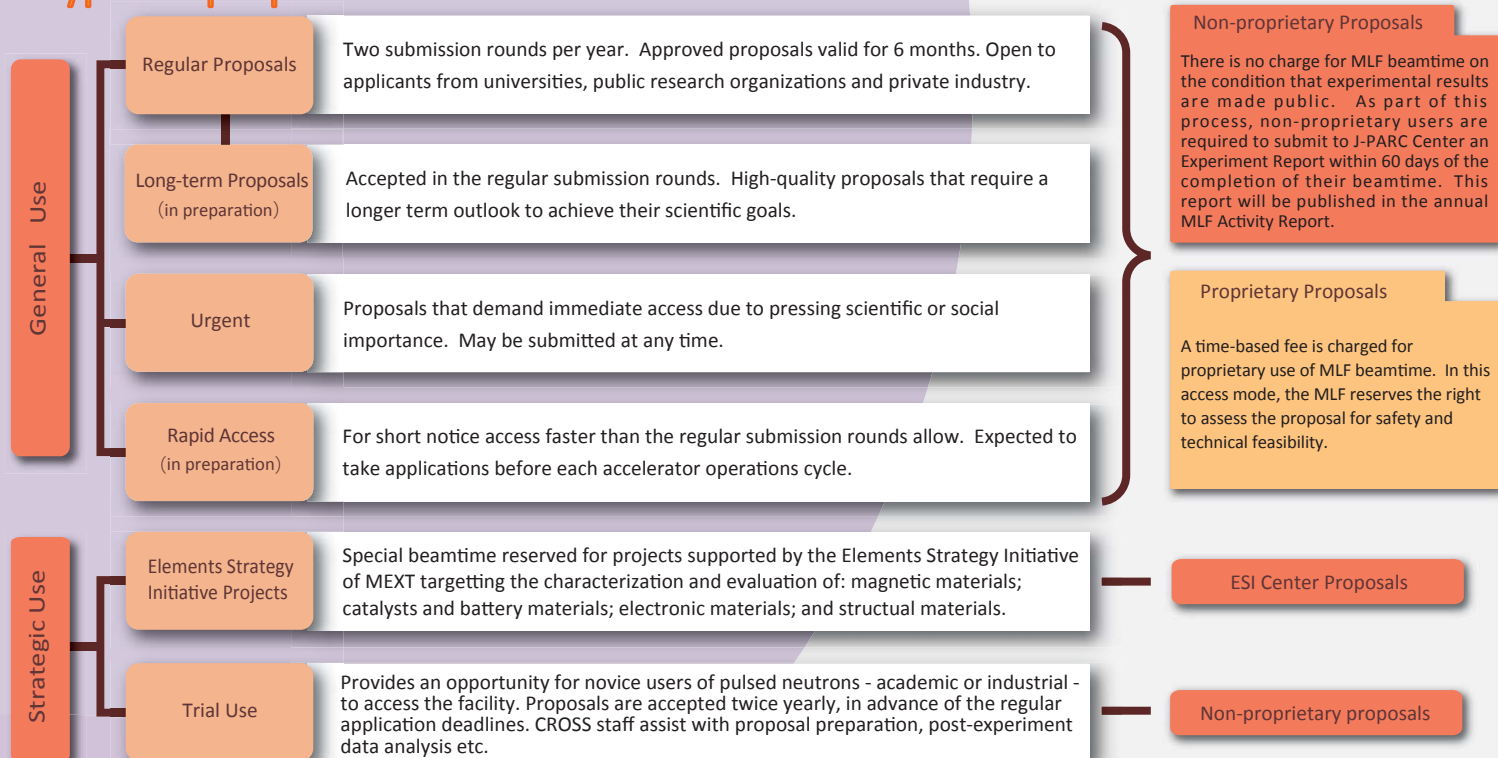
4D-Space Access Neutron Spectrometer



Measurement of spin and lattice dynamics and magnetic excitations in strongly correlated electron and low-dimensional spin systems

How to access the J-PARC MLF beamline

Types of proposals



STEP 1: Consultation

For information about the neutron beamlines at J-PARC or assistance with any aspect of accessing these facilities, feel free to contact the CROSS-Tokai Science Coordinators.

Science Coordinators
E: user_question@cross.or.jp
T: +81 29-219-5300
F: +81 29-219-5311

J-PARC Center Users Office

Ibaraki Quantum Beam Research Center

STEP 2: Proposal submission

Submit a proposal online via the J-PARC Proposal Submission System at <https://jpm.s.j-parc.jp/j-pas/auth/menu.jsp>
All non-proprietary proposals are assessed by the Proposal Evaluation Committee

STEP 3: Administrative requirements

Once your proposal has been approved, complete the administrative requirements online via the J-PARC User Support System at https://jrs.j-parc.jp/usjparc/ui/index_E.jsp
For more detail, please <http://j-parc.jp/researcher/MatLife/en/applying/index3.html>

STEP 4: Using the beamline

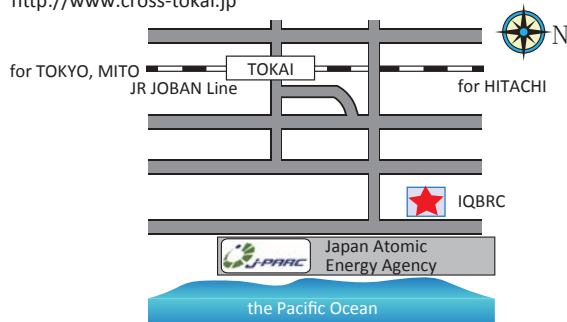
STEP 5: After the experiment

After your beamtime, complete the post-experiment administrative requirements

- Submit a Beamtime Completion Report
- Submit an Experiment Report within 60 days (non-proprietary proposals)

For more details please see <http://j-parc.jp/researcher/MatLife/en/applying/index3.html>

CROSS TOKAI
<http://www.cross-tokai.jp>



[Contact us]

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