International Advanced School in Muon Spectroscopy

Applying for Beamtime

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Planning the experiment

- Think about your proposal
- What question do you want answered
- How can muons help?
- What type of experiments?
- Which facility/instrument?

If you don’t know then please contact us
The Proposal Process

ISIS

• 2 calls per year
  (deadlines April and October)
• All submissions via ISIS website
• ~110-120 proposals submitted per round
• Oversubscription ~1.8-4
• 6 weeks after the deadline, the selection panel meets
• Results a few weeks after that (with comments)
• Instrument scientist will then ask for preferred dates
• Schedule produced, local contacts assigned
• Run experiments!

PSI

• 2 calls per year
  (usually deadlines December and May)
• All submissions via PSI digital user office (PSI-DUO)
• ~150 proposals submitted in round 1 and ~100 proposals in round 2
• Oversubscription ~1.4 - 4
• 6 weeks after the deadline, the selection panel meets
• Results a few weeks after that (with comments)
• Schedule produced according to exclusions set by the users
• Run experiments!
The Proposal Process

http://www.isis.stfc.ac.uk/apply-for-beamtime/

https://duo.psi.ch/duo/
• One can (re)submit a new proposal, edit a saved one, etc
How the proposal is supported (associated grants, or studentships, or industry links) is important.
You will then be guided through the different steps (instrument, sample environment, sample, etc).

Always contact the instrument scientists if you are unsure about instrument/sample environment or other questions.

**IMPORTANT:**

- Due to their specificities, it is important for the instruments HAL-9500 and LEM to contact the instruments scientists prior to submit (and write) a proposal.
- @PSI Define the exclusion dates for your experiment! NO further contact will be made with the proposers concerning the scheduling
- @ISIS We’ll contact about scheduling if you experiment is successful
A safety assessment will be needed before the experiment will be run.
The Case

- Proposals judged on science

- Upload a scientific case (2 pages ISIS, 3 pages PSI).
  - Don’t rely on colour
  - Will be reduced to 70%: don’t use fonts <12pt size. Be careful with figures
  - Self-contained (but can include references)

- Explain the background (timeliness, technological relevance, etc)
- What question(s) are you trying to answer?
- How will muons help - what information will you get?
- Why muons (consider that µSR is a very expensive technique)?
- Describe the measurements (no. samples, temp. / field scans)
- Justify the time you are asking for (be specific)
- Samples - do you have them? Say how they been characterised
- Demonstrate you’ve used previous beamtime well
‘In the past, several of these systems have been studied by means of muSR. Reanalysing the data shows that substantial parts of the data are missing . . . . .’

‘the burst of muons, rather than one muon at a time, will simulate hydrogen diffusion and encourage competition for traps . . . .’

‘we will search for the multi-spitoon excitations’

‘CsNiBr$_3$ is isomorphic to CsNiBr$_3$ [2]’

‘we will probe the two mango dispersion’

‘I am overwhelmed by the feeling that I have spent longer reading this proposal than the author spent writing it’
External panel to advise ISIS or PSI on the science

Panel recommends a program for the facility to run
Other types of Proposals

**Rapid Access (ISIS), Director Discretion Time (PSI)**
- For rapidly-moving science areas, new sample discoveries, other urgent studies
- Proposals can be submitted any time
- Rapidly reviewed
- If awarded time, scheduled as soon as possible
- Must be a clear case as to why the measurement is urgent

**Xpress Access**
- For initial characterisation of samples or feasibility checks on samples for future beamtime
- Proposals are short, and can be submitted any time
- Reviewed internally
- Awarded up to 5 hours of beamtime on either MuSR or EMU.
- Users need not come for the measurement - can send the sample in

**Proprietary Research (Industrial access)**
- Proprietary beam time is defined as work that will not be made available in the open literature.
- Each facility has routes for this access and may incur fee
• Access to Raw Data and Metadata obtained from an experiment is restricted to the Experimental Team for an embargo period of three (3) years after the end of the experiment.

• Researchers who carry out analyses of Raw Data and Metadata which are openly accessible shall, to the extent practicable, contact the original PI to inform him and suggest a collaboration if required.

• Raw Data and Metadata explicitly used for peer-reviewed publication will become Open Access at the time of such publication.
Available to answer questions, deal with problems, etc:
Flow chart for an ISIS experiment

Proposal → Facility Access Panels → Beamtime awarded → Experiment scheduled

Experiment contact asked to:
1. complete ERA
2. list other team members

User office email team members:
1. provide STFC logins
2. link to book accommodation
3. link to online registration

Visitors need to:
1. book accommodation
2. check details
3. check health information
4. complete online safety test

Run the experiment!

PSI similar
Online systems

My Safety Tests

This system should be used to complete the safety tests you must pass.

The information collected by this system will also help us improve our registration process.

Please ensure that your safety tests are valid for the duration of your experiment. If you need more than one test, you can take the test as many times as you need.

My Visits

to Rutherford Appleton Laboratory

This system is used by staff and visitors at the Rutherford Appleton Laboratory (RAL) and is part of the experimental facility.

It is important you use this system to record all visitors who will be visiting the RAL facility. It is also important that you record the date and time of your visit.

Request Badge and Dosimeter for next schedule experiment
Here to help!

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