

October 28, 2019

TO: Users of TRIUMF's Subatomic Physics Facilities

SUBJECT: Notice of the TRIUMF Subatomic Physics
Experiments Evaluation Committee Meeting

The next meeting of the TRIUMF Subatomic Physics Experiments Evaluation Committee (SAP-EEC) will take place on:

Thursday & Friday, January 30th & 31st, 2020

The DEADLINE for submitting Letters of Intent, New Proposals, and Progress Reports is firm at:

MONDAY, DECEMBER 9TH, 2019
(23:59:59, VANCOUVER TIME)

If you would like to submit a proposal to be reviewed at the January 2020 meeting, please be sure to **follow the attached detailed instructions** and adhere to the deadline.

Please note: Spokespersons are required to make the facility coordinator(s) and/or collaboration spokespersons for the relevant experimental facilities aware of their new proposal(s). The name of the facility coordinator can be requested from Allayne McGowan (sciencediv@triumf.ca) or found [here](#). Please be aware that many facilities encourage their own internal deadlines for submission so that proposals can be internally checked before final submission.

If you are planning to propose an experiment with **accelerated beams of high-mass**, make sure to read the guidelines for estimating the post-accelerated yields that are provided online [here \(CSB Guidelines\)](#). Please use the transmission numbers and the web-tool to estimate the on-target intensities and major contaminations.

Please remember TRIUMF uses an **8-hour shift pattern**; make sure your requested beam time is stated in 8-hour shifts.

Please note that both ISAC target modules in rotation are currently experiencing limitations of bias. Thus, for the time being, we will be restricting proposals to only those requiring lower than 40kV bias.

If your experiment was approved at the January 2017 EEC or before, any remaining approved high priority shifts will expire unless a progress report is submitted to obtain EEC approval for an extension. Physical Sciences Division

will send the experiment spokesperson(s) an email reminder if this is the case. Shifts for medium priority experiments will expire automatically in any case and an extension cannot be requested.

All new proposals and progress reports will be required to make a formal presentation to the committee during the meeting, unless advised otherwise. If you plan to present via video-conferencing, please contact Allayne McGowan at the Physical Sciences Division: sciencediv@triumf.ca.

SAP-EEC MEMBERS

The Subatomic Physics Experiments Evaluation Committee consists of international experts in theoretical and experimental subatomic physics:

Chair: Thomas Nilsson – Chalmers University of Technology, Sweden

Secretary: Sonia Bacca – Johannes Gutenberg-Universität Mainz, Germany

Members: Marialuisa Aliotta – University of Edinburgh, UK
Heather Crawford – Lawrence Berkeley National Laboratory, USA
Catherine Deibel – Louisiana State University, USA
Jason Holt – TRIUMF, Canada
Dan Melconian – Texas A&M University, USA
Iain Moore – University of Jyväskylä, Finland
Oscar Naviliat-Cuncic – NSCL Michigan State University, USA
Ingo Wiedenhoever – Florida State University, USA

Ex-officio: Chris Ruiz – TRIUMF, Canada

DETAILED INSTRUCTIONS

The Subatomic Physics EEC approval process has two approaches available. These are as follows:

LETTER OF INTENT (LOI):

Describes the intent to carry out a certain experiment or scientific program for which a substantial extension of the facility capabilities is needed. These extensions include 1) development of certain beams with sufficient intensities and qualities; 2) new experimental capabilities, such as major new equipment or new techniques. Lols should provide an estimate of the amount of beam time necessary to carry out this program at a given intensity, and correspondingly enter this as a shift request in the online submission system. In particular, for long-term programs that would require large amounts of beam time, it is important for TRIUMF and the EEC to be aware of such needs.

The submissions are reviewed by the TRIUMF Beam Readiness Review Committee to determine what the beam development needs or prospects are for the Lol, and the results of this will be communicated to the proponents and the SAP-EEC Committee prior to the SAP-EEC meeting.

The EEC evaluates the scientific and technical merit and judges - with input from the facility - the general feasibility of the proposed research, explicitly taking into account the approximate amount of beam time required.

For experimental or beam production facility upgrades that have a significant impact on TRIUMF either during the upgrade or in subsequent operation, a [Project Charter Sheet](#) should be submitted. The Lol and EEC report would be part of the input to the Gate Review process.

The EEC may **endorse the Lol with high or medium priority (1 and 2 respectively) OR not endorse an Lol** that is deemed technically unfeasible or if the scientific case does not have sufficient merit.

The endorsement of an Lol signals that the EEC and TRIUMF support the general experimental program proposed and expects that competitive proposals for this program will be submitted on the timeline presented in the Lol. Any beam development needs for the proposed program will be entered into the beam development plan (see below).

For extensions to their experimental facility, the proponents are encouraged to seek funding for and complete any planned technical developments. Once a requested beam development has been achieved, the results will be posted in the yield database. Further inquiries about beam development status can be directed to Chris Ruiz (ruiz@triumf.ca). The proponents are expected to submit proposals for experimental shifts once readiness of beam(s) and experimental equipment has been established.

Please note that the endorsement of an Lol does not guarantee the acceptance of proposals based on the developments proposed in the Lol, but these proposals will be judged on their scientific merit at the time of submission and compared to other submissions. **TRIUMF management will communicate the support for an endorsed Lol to NSERC and other funding agencies, if requested.** Once Lols have been reviewed, there is no follow-up directly related to the Lol. New proposals related to the Lol will individually obtain experiment numbers that are not connected to the Lol. Reference to the Lol can and should be made in the proposals where appropriate.

Special cases of LOIs leading to publications:

If an LOI is submitted for which the act of beam development itself requires use of the particular experimental facility, e.g. measurement of yield using a multi-reflection time of flight spectrometer, and leads itself to the intended publishable physics result in the same number of shifts it would require to do the development, then this should be submitted as an Lol, with a request for those small number of shifts for development. Such special Lols will be required to make a presentation to the EEC. Such Lols should only be submitted after careful discussion with beam development experts at TRIUMF.

PROPOSAL:

Proponents ask for allocation of a number of shifts for a clear scientific case on the basis of the best estimate of achievable beam intensities and experimental efficiencies. Beam can be expected with reasonable certainty to be available within 2 years, i.e. no major new developments needed. Technically the experiment should be convincingly mature to successfully run. New equipment should have been successfully commissioned. If it uses only well-established standard technologies, an explicit commissioning may not be needed. The EEC will review proposals and either grant the statuses of: **approved with high or medium priority** and allocate a certain number of shifts; **not approved** if deemed technically unfeasible, if the scientific case does not have sufficient merit, or if beam time is limited and the scientific case is less compelling than that of other proposals submitted; the EEC may **defer** the experiment if the EEC feels that the information presented is not sufficient or the EEC feels it has not sufficient expertise to judge the case and as a result recommends that an external expert review is conducted. Please note that an experiment which is deferred twice in a row will be, by definition, put in the category of not approved.

Approved stable beam experiments will also be given either high or medium priority. The level of priority will be decided upon based on the strength of the scientific case, while also factoring in the uniqueness of the experiment as proposed using facilities at TRIUMF.

NOTE: If you intend to propose an experiment for which some of the isotope yields have been established while other yields have yet to be established, please submit this as a single proposal with the following details: (a) a shift request for the isotopes that have already been demonstrated; (b) a request for beam development for the other isotopes as well as an indication of how many shifts *would* be needed to perform the experiment (assuming a range of yield values) once the

yields have been finally established. This proposal will be evaluated by the EEC partially as an Lol and partially as a Proposal, all under the umbrella of a single experiment number.

Before the 3-year expiration, the proponents must submit a progress report if they have not run all shifts of the experiment and the proposal expires, unless the EEC sees a special reason to keep it active. The request for remaining or new shifts in progress reports competes with all other submissions. The maximum number of RIB shifts approved per EEC meeting is 50% of the maximum RIB beam time delivered per year.

For a list of beams available, please visit the [ISAC Yield Database](#).

For New Research Proposals or Letters of Intent:

Spokespersons: Before you can proceed, you must contact the Science Division's office at sciencediv@triumf.ca (604-222-7438). Please include the spokespersons' names, contact information, and name of the experiment. The division's Administrative Assistant (Allayne McGowan) will issue you an experiment number. If you do not yet have a TRIUMF Login, this must also be requested from sciencediv@triumf.ca. If you have a TRIUMF Login already, but cannot remember your username or password, you can reset it by visiting <https://mis.triumf.ca/identity> then click "Change Password" and "Forgot Password".

Proceed to the [Spokespersons' Portal](#) to start filling in the information for the experiment proposal. Please follow the instructions, which we ask that you read carefully before beginning your submission (instructions can be found on the "[How To Submit a Proposal](#)" webpage).

Progress Reports

Spokespersons: Go to the [Spokespersons' Portal](#). Log in to the Spokespersons' Portal with your TRIUMF Login and password. Click on the experiment number and then click on "New Submission" to start your progress report. Please follow the instructions, which we ask that you read carefully before beginning your submission (instructions can be found on the "[How To Submit a Proposal](#)" webpage). You can reset your TRIUMF Login by visiting <https://mis.triumf.ca/identity> then click "Change Password" and "Forgot Password". If you do not yet have a TRIUMF Login, this must be requested from sciencediv@triumf.ca.

Any problems or bugs during the submission process should be reported to the Science Division's office at sciencediv@triumf.ca (or by telephone at 604-222-7438). In addition, you can contact the ISAC Liaison Scientist, Martin Alcorta, (malcorta@triumf.ca) with detailed questions or request for information.

The following direct links should be helpful:

- The Spokespersons' Portal can be found at <https://mis.triumf.ca/science/experiment/spokesperson/list.jsf>

- The Guides and Forms can be found at <http://www.triumf.ca/research-program/planning-experiments/how-submit-proposal/sap-eec-process>
- The SAP Committee Information can be found at <http://www.triumf.ca/research-program/planning-experiments/experiment-approval/about-subatomic-physics>
- The Call for Submissions can be found at <http://www.triumf.ca/research-program/planning-experiments/experiment-approval/call-for-submissions-agendas>

USER LIAISONS

TRIUMF has a team of User Liaisons to assist visiting scientists before, during, and after their visits to the lab. This includes help with your proposal, progress report, and/or letter of intent submissions. Please visit <http://www.triumf.ca/user-liaisons> for contact and other information

Prior to your visit to TRIUMF, please visit <http://www.triumf.ca/home/for-scientific-visitors> for important information on travel requirements, experiment planning, training requirements, etc.

Note that TRIUMF is dedicated to continual improvement in achieving our user satisfaction goals. To that end a number of "User Satisfaction" Surveys are being developed to obtain feedback on users' research experiences while visiting the lab. If you have recently completed a research visit to TRIUMF, please go to <http://www.triumf.ca/exit-surveys> for the appropriate User Satisfaction Surveys. *Only the ISAC and CMMS surveys are available at this time.*

END OF CALL FOR SUBMISSIONS