NATIONAL HIGH MAGNETIC FIELD LABORATORY
Operated by Florida State University, University of Florida, and Los Alamos National Laboratory
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NHMFL User Proposal Policy

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A. Proposal Review and Magnet Time Assignment

The NHMFL operates seven user facilities (DC Field, Electron Magnetic Resonance-EMR, Ion Cyclotron Resonance-ICR, and Nuclear Magnetic Resonance-NMR in Tallahassee; Pulsed Field Facility at LANL; High B/T and Advanced Magnetic Resonance Imaging and Spectroscopy-AMRIS at UF). Each facility is managed by a Head of User Program (HUP) who is an NHMFL-employed scientist. This document contains the specific NHMFL policy for proposal review, magnet time assignment, and appeal of magnet time assignment decisions.

1. Proposals for magnet time at any of the facilities are submitted online at the same user portal. All proposals must include:
   - Up to three (3) page description of the proposed science and/or technology development, including broader impacts of the work;
   - Up to one (1) page description of previous relevant work; and
   - Two (2) page biographic sketch, including up to 5 publications related to the proposed project.

   In addition to the proposal, a magnet time request (experiment) is submitted as the next step in which the details of the experiment are enumerated; specific magnet system requested; funding source information; sample information; experimental plan; and requested scheduling windows are provided by the submitter. Access to systems in the DC Field Facility requires an additional report of prior results at lower fields to demonstrate the need for high fields. In limited cases, the NHMFL Director may give a waiver of this requirement.

   Proposals are valid for three (3) years from the date of submission.

2. The seven user programs each have a User Proposal Review Committee (UPRC) that is responsible for selection and recommendation of user proposals to the applicable Head of User Program.

   The HUPs recommend the members of the UPRCs to the NHMFL Director. The NHMFL Director appoints the members of the UPRC. Each committee consists of NHMFL-affiliated staff members/users and external users or other members of the scientific community at large. “External” is defined for this purpose as not affiliated with the NHMFL, FSU, UF, or LANL. The UPRC will have at least seven (7) members and have more external members than internal. Due to the breadth of the proposed science conducted at Magnet Lab facilities, the HUP may seek

additional external or staff-written reviews on a proposal-by-proposal basis to ensure a comprehensive and high quality review process.

To preserve confidentiality, the membership of the UPRCs is available for review by NSF and NHMFL advisory committees, but it is not posted publicly.

3. Per NSF policy in NSF Grant Proposal Guide, Section A. Review Criteria, proposal reviews are based on two criteria: (1) the scientific and/or technological merit of the proposed research, and (2) the "broader impacts" of the proposed work. Proposals are graded online using the following scale:

   A – Proposal is high quality and magnet time must be given a high priority
   B – Proposal is good quality and magnet time should be granted
   C – Proposal is acceptable and magnet time should be granted at NHMFL discretion
   D – Proposal has minimal merit and granting magnet time should be a low priority
   F – Proposal has little/no merit and magnet time should not be granted.

4. Reviews are conducted in strict confidence. UPRC members are allowed to submit proposals, but they will not be used as reviewers for any proposal for which they are cited as the PI or collaborator. Obvious conflicts of interest are removed when the HUP selects reviewers; and reviewers will be required to certify that they have no conflict of interest with the proposal under review. Following NSF guidelines, conflict of interest occurs in situations such as: present or past PhD advisor/student; a collaborator within the past 48 months; a co-editor within the past 24 months; or any other circumstance where impartiality could be questioned.

   The NHMFL is careful not to discourage review committee members from submitting proposals and/or from being NHMFL users.

5. The HUPs recommend magnet time assignments for their facility to the NHMFL Director in accordance with the written recommendations and grades assigned to user proposals by the UPRC. The HUPs dovetail the UPRC recommendations with the availability and scheduling of specific magnets, experimental instrumentation and user support scientists. Considerations that increase prioritization given to a particular proposal are:
   - PI is an early career researcher (7 years since receipt of PhD).
   - PI is from an underrepresented group or from an institution serving underrepresented populations.
   - PI is a first-time principal investigator.

   Considerations in cases of oversubscription for a particular magnet or instrumentation include:
   - The PI has not received magnet time recently, i.e. during the previous scheduling period.
   - The PI has used past magnet time effectively.
   - Data collected by the PI at the NHMFL has been published in a timely manner.
   - The PI's prior results and/or discussions with the PI provide compelling evidence that the requested experimental technique is not likely to yield high quality data.

   The NHMFL Director is responsible for final decisions on scheduling of magnet

time based on these recommendations. Anonymous reviews are provided to the PI via the online system. All documentation regarding magnet time assignments are available upon request to the NSF and NSF Review Committees, but they are otherwise kept confidential.

6. Each year as part of the annual User Committee Meeting, the four Magnet Lab User Committees (DC/Pulsed/High B/T; NMR/AMRIS; ICR; EMR) will review the NHMFL proposal review process for quality and fairness. These committees will also serve as external reviewers of last resort for any proposals that did not receive adequate review during the previous year. Examples of situations that may occur include;
   (a) a proposal was not fully reviewed because a minimum number of external reviews was not available,
   (b) a new user was awarded discretionary magnet time by the Director prior to the full review of a formal proposal
   (c) discretionary magnet time was awarded by the NHMFL Director prior to a full review of a formal proposal. These "Rapid Access" requests allow NHMFL users to quickly respond to extraordinary scientific opportunities, e.g., pnictide research in 2008; a breakthrough circumstance in energy research, or a transformative development in biochemistry. To request Rapid Access, the user/submitter checks a box during the online process which, upon submission, triggers an e-mail notification to the Director and applicable HUP. Rapid Access requests will only rarely be approved.

B. Appeal of Magnet Time Assignment Decision

A scientist who is denied magnet time has the right to appeal the decision. The Magnet Time Appeals Committee is chaired by the Director of the NHMFL and includes the Chair of the NHMFL User Committee (or his/her designee) and one additional member of the NHMFL User Committee selected by the NHMFL Director on an *ad hoc* basis.

The appeals committee will review the unsuccessful proposal in the context of competing proposals, both accepted and rejected, as well as the total amount of magnet time distributed to users in the relevant user program(s). The Director will make a final decision and inform the appealing scientist and the relevant Head of User Program. A summary of the appeal and decision will be provided at the next NHMFL Users Committee meeting.

The appeals committee has wide latitude in developing its recommendation. It can endorse the denial of magnet time, recommend that magnet time be granted as a high priority at the earliest possible date (potentially displacing a lower priority user), or recommend that the proposal receive magnet time in the next allocation of magnet time. If the NHMFL Director overturns a denial of magnet time, the NHMFL Director will inform the relevant Head of User Program and explicitly consider whether to provide him/her feedback regarding any perceived bias in assigning magnet time.