How to Apply for and Get* Beam Time

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Small-Angle Scattering Short Course

Advanced Photon Source

October 2013

** No guarantees, of course*

Basics of the APS Proposal System
http://www.aps.anl.gov/Users/apply_for_beamtime.html

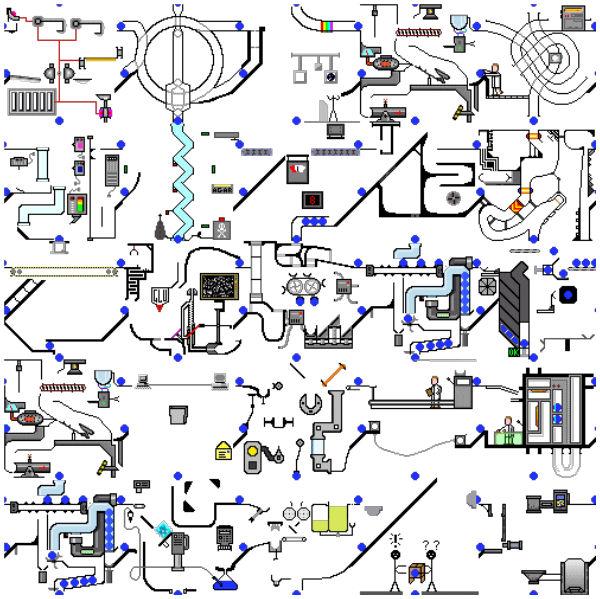
- **NEW USERS:** to avoid delays and to make the most of your time on site, read Become a User. You must register as a user and receive a badge number before submitting a proposal.

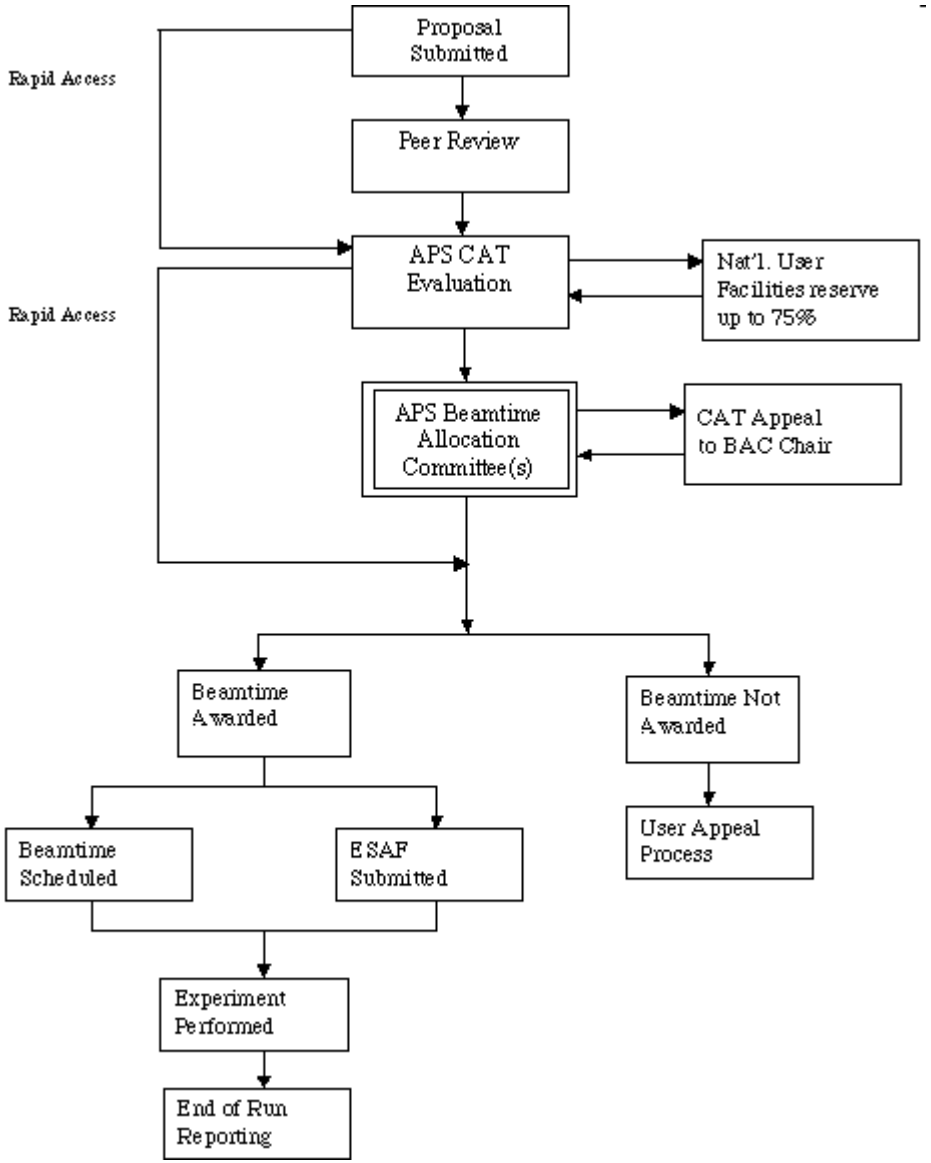
About the proposal process:

- The APS makes beam time available to the international scientific community through the General User Program (GUP). Proposals from general users are submitted, reviewed, and allocated time through a web-based application. The proposal submission, review, and allocation cycle occurs three times a year (roughly in March, July, and October), prior to each APS run cycle.
- Proposals are peer-reviewed and rated, and beam time is allocated on the basis of these reviews by one of two Beam Time Allocation Committees. Once time has been allocated, the beamline staff schedule the proposals.

Next proposal deadline: Friday, 2013 November 1, 11:59 pm CDT

Review Process





http://www.aps.anl.gov/Users/General_Reference/Policy_Procedures/participation.html

Definition of Ratings for Proposals

Table 1. Definition of Ratings Used in Reviewing General User Proposals	
1 - Extraordinary	The proposal involves highly innovative research of great scientific importance. Proposed research will significantly advance knowledge in a specific field or scientific discipline. Considerable societal relevance is demonstrated. The radiation characteristics of the APS are highly desirable for the success of the proposed work.
2 - Excellent	The proposed research is of high quality and has potential for making an important contribution to a specific field or scientific discipline. The work is cutting edge and is likely to be published in a leading scientific journal. The radiation characteristics of the APS are important to the success of the proposed work.
3 - Good	The proposed research is near cutting-edge and likely to produce publishable results. Impact on a specific field or scientific discipline is likely. Synchrotron radiation is essential to accomplish the intended goals of the research. The proposed work will greatly benefit from access to the APS.
4 - Fair	The proposed research is interesting but may not significantly impact a specific field or scientific discipline. Publication may or may not result from this research. Synchrotron radiation is required, but the proposed work could be performed at other facilities.
5 - Poor	The proposed research is not well planned or is not feasible. Results would not make important contributions to fundamental or applied understanding, and work is not likely to result in publication. The need for synchrotron radiation is not clear.

http://www.aps.anl.gov/Users/General_Reference/Policy_Procedures/participation.html

This is the mean of recent SAXS proposals at the APS (there is some stiff competition)

http://www.aps.anl.gov/Users/apply_for_beamtime.html

APS - General User Proposal - Mozilla Firefox

File Edit View History Bookmarks Tools Help

https://beam.aps.anl.gov/pls/apsweb/gup0001.display_exp?i_pid=792659010841428&i_page_num=1&i_gup_id=10:

Most Visited | Getting Started | Latest Headlines | weather | APS GUP | BCDA | NeXus | BensBargains | freshmeat | TV | canSAS wiki | BCDA tasks - Trac

APS - General User Proposal

Main Menu | Search Criteria | Instructions | Logout |

General | Experimenters | Abstract | Beamtime Request | Questions | Review Panel

Proposal : GUP-10325

Proposal Title:

Shifts Recommended by PRP: not available

Shifts Allocated by BAC or Scheduled by Beamline in current cycle (0)

Shifts Used to date: (0)

Shifts Remaining: not available

Do you want this proposal to be considered for project status? description	Yes ○	No ◉
Does this proposal require mail-in service?	Yes ○	No ◉
Does this research involve macromolecular crystallography (single crystals) ?	Yes ○	No ○
Will the data collected be considered proprietary ?	Yes ○	No ○
Will the data collected be considered classified ?	Yes ○	No ○
Does this research involve human subjects or materials ?	Yes ○	No ○
Does this research involve live animals?	Yes ○	No ○
Are there known safety hazards associated with the proposed experimental procedures or your samples ?	Yes ○	No ○
Is this research required for a student's thesis ?	Yes ○	No ○
Is this proposal related to another general user proposal ? If so, which one(s) and how ? (500 characters or less)	Yes ○	No ○

Subject of Research:

- ☐ Materials science
- ☐ Physics
- ☐ Chemistry
- ☐ Polymers
- ☐ Medical applications
- ☐ Biological and life sciences
- ☐ Earth sciences
- ☐ Environmental sciences
- ☐ Optics (excluding x-ray optics)
- ☐ Engineering
- ☐ Instrumentation related to user facilities
- ☐ Purchase of specialty service or materials
- ☐ Other (specify) **Specify Other :**

Generate Report | Copy Proposal | Next Page

Pressing SAVE will allow you to save this proposal and continue to make changes. Notifications will not be sent. Save

Pressing SUBMIT will save this proposal AND notifications will be sent to the APS. No changes can be made thereafter. Submit

Proposal # : 10325

Main Menu | Search Criteria | Instructions | Logout |

Done | beam.aps.anl.gov

Proposal: "General" page

- Pick a good title. Boring and to the point is better than spectacular and vague.
  - "SAXS study of gamma-prime precipitates in Waspaloy"
  - *vs.*
  - "Strengthening superalloy turbine blades"
- Is this proposal related to another one you are submitting this cycle?
- Is it thesis related? Is there a deadline?
- Answer all the questions.

Proposal: “Experimenters” page

General | Experimenters | Abstract | Beamtime Request | Questions | Review Panel

Proposal : GUP-10325

Spokesperson: Find

First Name : Last Name

Phone: Email Badge

Institution:

Mailing Address:

Experimenters Coming to APS:	Badge	First Name	Last Name	Affiliation	Phone	Email	Delete
Find							
Find							
Find							
Find							

Experimenters Not Coming to APS:	Badge	First Name	Last Name	Affiliation	Phone	Email	Delete
Find							
Find							
Find							
Find							

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Proposal # : 10325

General | Experimenters | Abstract | Beamtime Request | Questions | Review Panel

Proposal : GUP-10325

You may attach supporting PDF documents to this proposal. Click here to attach/detach files

List of Attachments

Abstract of Proposed Research

NOTES :

- You **MUST** have an abstract below. Attaching only a PDF is not enough.
- Abstract **MUST** be less than 2000 characters including spaces.
- Abstract and the proposal title may become public information.

Characters Remaining :

None

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Proposal # : 10325

General | Experimenters | Abstract | Beamtime Request | Questions | Review Panel

Proposal : GUP-10325

Rapid Access Description | Make New Request | 3rd

Total 8-hour shifts requested for the LIFE OF THE PROPOSAL	
Total 8-hour shifts recommended by the Proposal Review Panel for the LIFE OF THE PROPOSAL :	not available
Total shifts used to date:	0
Number of the shifts remaining	not available
For which scheduling period are you applying?	Status :
Techniques Required:	
Choice Of Beamline:	
Please select the instrument based on your beamline selection:	For 1st beamline For 2nd beamline For 3rd beamline
Any appropriate beamline	☑
Number of 8-hour shifts requested for THIS scheduling period	
Minimum number of usable shifts per visit:	
Do you have specific scheduling requirements ?	
What equipment is required ? What equipment will you bring ?	
Please list any new publications resulting from your work at the APS.	
Describe the progress made during your most recent beamtime. (2000 characters including spaces)	
Unacceptable Dates (MM/DD/YYYY)	From / To to to to

Previous Page | Generate Report | Next Page

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Proposal # : 10325

General | Experimenters | Abstract | Beamtime Request | Questions | Review Panel

Proposal : GUP-10325

Please specify the funding source(s) for your proposed research:

- ☐ DOD (specify)
- ☐ DOE, Office of Basic Energy Sciences
- ☐ DOE, Office of Biological and Environmental Research
- ☐ DOE, Other (specify)
- ☐ Foreign (specify)
- ☐ HHIH
- ☐ Howard Hughes Medical Institute (HHMI)
- ☐ Industry
- ☐ NASA
- ☐ NIH
- ☐ NSF
- ☐ Other U.S. Government
- ☐ USDA
- ☐ Other (specify)

Specify Other:

What is the scientific or technical purpose and importance of the proposed research? (limit : 500 words)

Why do you need the APS for this research? (limit : 100 words)

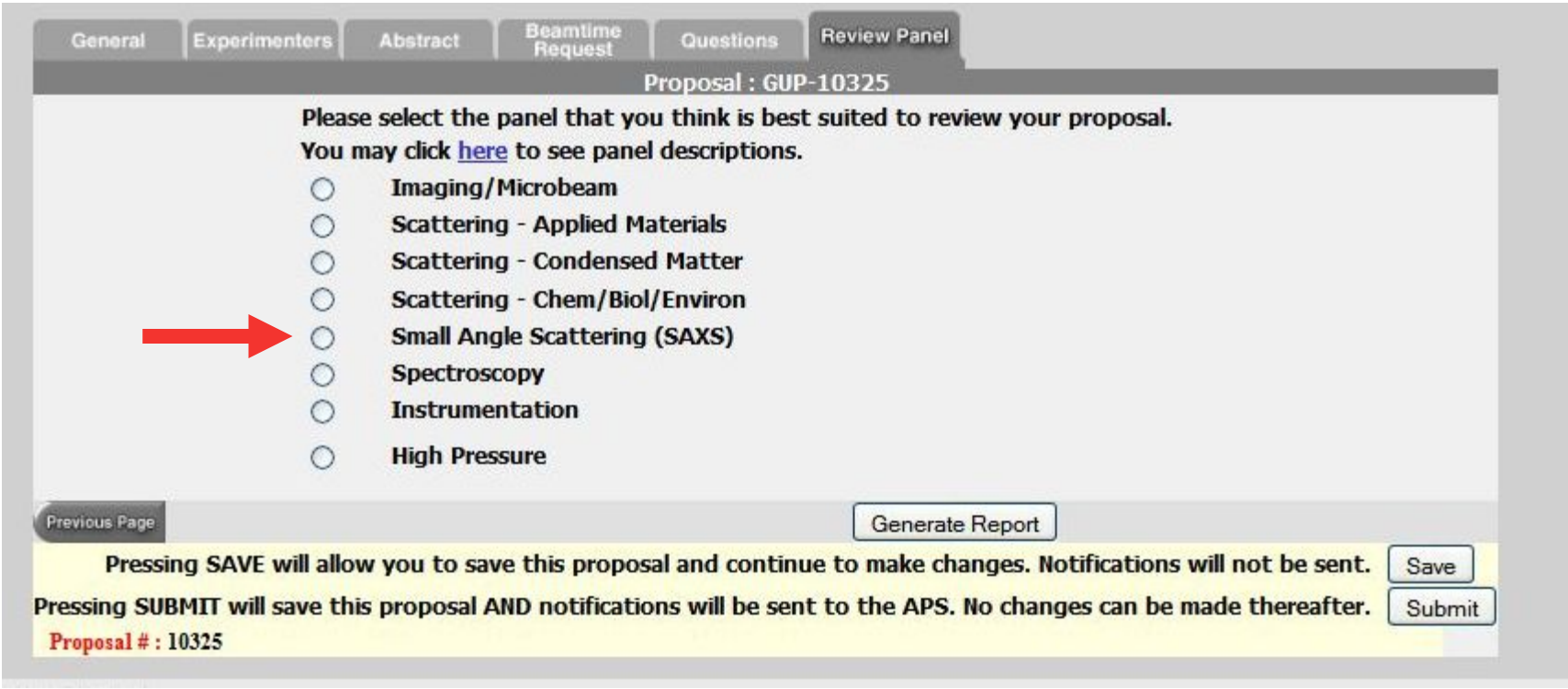
Why do you need the beamline you have chosen? (limit : 100 words)

see next page …

Questions asked

- What is the scientific or technical purpose and importance of the proposed research? (limit : 500 words)
- Why do you need the APS for this research? (limit : 100 words)
- Why do you need the beam line you have chosen? (limit : 100 words)
- Describe the participants' previous experience with synchrotron radiation and the experimental results obtained. (If you refer to previous publications, be sure to include complete citations.) (limit : 100 words)
- Describe the proposed experiment(s), including samples and procedures, and explain the basis for your estimate of the amount of beam time needed. (limit : 500 words)
- Provide an overall estimate of the amount of beam time you will need to accomplish the goals of your proposed experimental program. How many visits during the two-year proposal period do you expect to need? How many shifts will you need during each visit (approximately)? (limit : 500 words)

Committee selection



How to write a Good Proposal

- Interesting science

- Good plan
  - Experience
  - Team
  - Collaborate with instrument scientist (name them on proposal, too)

- High probability for successful experimental result
  - Reasonable objective
  - Proper choice of instrument & estimate of beam time
  - Defined experimental method
  - Clear analytical method

- Demonstrate performance
  - Previous data (show it)
  - Publication history (cite, if relevant)
  - Preliminary results

Purpose and Importance of Research

- Start with a concise explanation of this specific proposal
- Include relevant information
- Discard irrelevant information

- Write clearly

- Your proposal competes with others. Be convincing.

Project Status Criteria

- A project proposal must justify reliable, predictable access over several cycles (up to two years) on a specific beam line (or several beam lines).
- These proposals may be candidates for project status, under which a fixed amount of beam time is allocated in advance for more than one cycle.
- A proposal requesting project status must:
  - specify the specific beam line(s) where the work will be performed
  - justify the need for that location.
- The PI must also justify why the goals of the proposal cannot be achieved effectively or efficiently under a regular General User Proposal (e.g., the level of investment, such as effort or setup time, to perform the experiment is so large that it can only be justified if regular or fixed access over several run cycles can be assured, etc.).

- *Project status will be **granted only sparingly**.*
- *Users need to make an excellent case for why the work cannot be effectively accomplished under a standard two-year General User Proposal.*
- *Might consider a Partner User Proposal as an alternative*

Several common pitfalls of otherwise decent proposals

- Proposal deadline (for next cycle) is before scheduled beam time. Note this in the proposal. Still, proposal must be competitive.
- Proposer is starved for time to write a *competitive* proposal, assumes committee is familiar with body of work. Proposal is very brief. *This is a risky endeavour.*
- Too many (or very old) attachments in the proposal. Add only what is necessary.
- Long setup time? Do you need beam or can some of it be done on a shutdown day? Avoid burning beam time for equipment setup.
- Large, multi-approach proposals: subdivide into standalone units
- Proposers have several proposals submitted for similar research in this cycle.
- Too many shifts requested for complexity of experiment.

Some boilerplate quotes from the review committee:

- "… many proposals fall into this - they show the raw data, explain in text that they want to be quantitative, but do not show quantitative results nor explain how quantitative results will be obtained. They need to demonstrate that they will use the results from the beam time effectively to be competitive."

- "Proposers could improve their score by including more experimental details, attaching previous results and expanding on the purpose and importance of the research."

- "Hasn't the proposed research been published previously?"

- We do not feel that granting 20 shifts/cycle for 2 years is consistent with the history of publication of this work.

- It is not clear how you will determine your results. Your analytical method was not clear in your proposal.

www.aps.anl.gov/Users/apply_for_beamtime.html

Graceffa Bio-CAT

ted Getting Started wxPython docs Green Sheets PyEpics HostAuth APS IT status MEDM Replacement T...

Argonne NATIONAL LABORATORY

Advanced Photon Source

» an Office of Science User Facility

U.S. DEPARTMENT OF ENERGY | Office of Science

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User Information:

- For Prospective Users
- For New Users
- For Current Users
- For Administrators
- MX Users
- APS User Portal
- APS Data Management Practices

- Find a Beamline
- Apply for Beam Time
- ESAF
- Contacts
- Calendars
- User Community
- Scientific Access
- Site Access/Visit
- Training

Apply for Beam Time

NEXT PROPOSAL DEADLINE:
November 1, 2013
@ 11:59 PM (Local)
Submit Proposal »

SEE ALSO:

- Calendar: deadlines, run & review dates
- Help Page: frequently asked questions, tips for success, common errors, blank forms, instructions
- Review Criteria
- Sectors Directory: check CAT websites for info about managed beam time

NEW USERS: to avoid delays and to make the most of your time on site, read Become a User. You must register as a user and receive a badge number before submitting a proposal.

About the Beam Time Request Process

All beam time at the APS must be requested each cycle through the web-based Beam Time Request System. Five types of requests are possible: General User, Partner User, Collaborative Access Team (CAT) member, CAT staff, and APS staff. Each beam time request (BTR) must be associated with a proposal, but the requirements for each proposal type differ.

General User proposals and BTRs: Proposals are peer reviewed and scored by a General User Proposal Review Panel, and time is allocated on the basis of scores and feasibility. A new BTR must be submitted each cycle, and for each cycle, allocation is competitive. Proposals expire in two years or when the number of shifts recommended in the peer

Good Luck and thank you for your attention!

Also see:

- http://www.aps.anl.gov/Users/Help
- http://www.aps.anl.gov/Users/Help/how_to_wow.html

Project Status Evaluation

- Project proposal requests will be
  - evaluated by the appropriate Proposal Review Panel (PRP)
  - then receive additional scrutiny by the subcommittee of the Scientific Advisory Committee (SAC) that reviews Partner User Proposals.
- To determine if a request should be granted project status, the SAC subcommittee will use
  - the rating given by the PRP,
  - the supplemental information supplied by the PI on the request,
  - and input from the sector management of the requested beamline(s).

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