

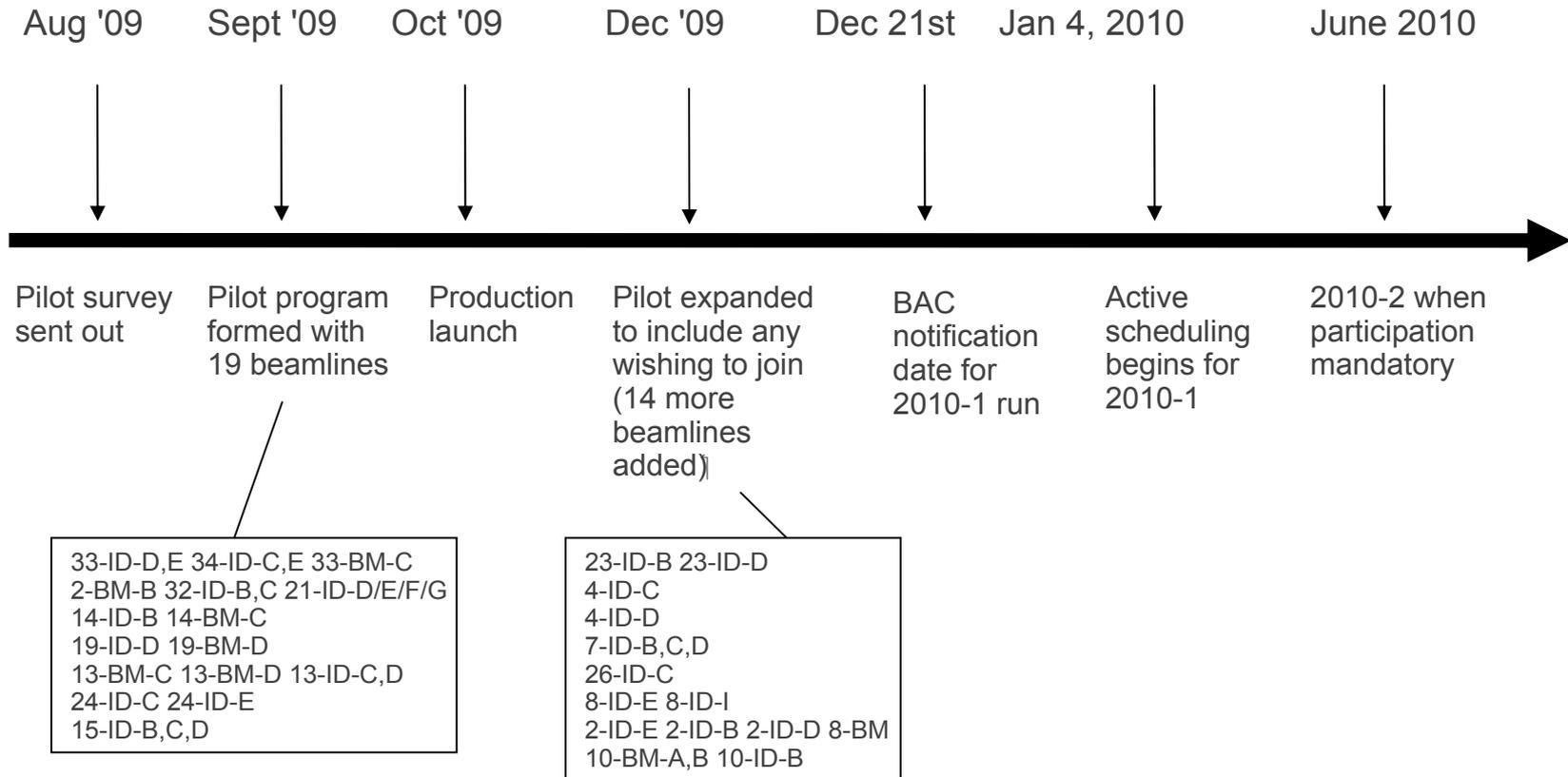
APS Beamline Scheduling System - Project Status

Claude Saunders

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Joint Meeting of the PUC Executive Board and
APSUO Steering Committee

Recent Project Timeline



Current Screenshots (Beam Time Request System)

The screenshot shows the main menu of the APS Beam Time Request System. At the top left is the Argonne National Laboratory logo. The page title is "Type of Beam Time Request - Main Menu". A "Logout" link is in the top right. The main content area is titled "Welcome to the APS Beam Time Request System. Please select an action:". There are three main sections: "Create a New Proposal" with buttons for General Users, Partner Users, CAT Members, APS Beamline Staff, and CAT Beamline Staff; "Existing Proposals" with search forms for finding proposals and requesting time; and "Administration" with a "Proposals Admin" button. A footer contains "ANL".

Argonne NATIONAL LABORATORY

Type of Beam Time Request - Main Menu

Logout

Welcome to the APS Beam Time Request System.
Please select an action:

Create a New Proposal

General Users

Partner Users

CAT Members

APS Beamline Staff

CAT Beamline Staff

Need help?
Learn about proposal system »
Update is coming soon...

Existing Proposals

Find Proposal:

Proposal # Submit Query

numeric portion only

Request Time for Proposal:

Proposal # Submit Query

numeric portion only

[Advanced Search »](#)

Administration

Proposals Admin

ANL

Current Screenshots (primary scheduling page)

Argonne NATIONAL LABORATORY Advanced Photon Source **Beamline Scheduling** You are logged in as SAUNDERS, CLAUDE [View Permissions](#) | [Logout](#)

Overview Create Schedule **View/Edit Schedule** View All Reporting Settings

Schedule: (2010-1) 2-BM-B Not Published << >> Day Week Month

Edit 2-BM-B:
 Activities: [New] [Edit] [Delete]
 Schedule Name: 2-BM-B
 Status: Not Published
 Save Changes Cancel

Schedule Warnings:
 1) Non-user Operation
 2) Blackout Dates
 3) Over-scheduled
 4) Over-scheduled

[Audit]
Schedule Guidance:
 Preferred Dates:
 Blackout Dates:

Calendar View: January 2010
 Sunday 24 Monday 25 Tuesday 26 Wednesday 27 Thursday 28 Friday 29 Saturday 30
 Jan 8:00AM machine studies
 Jan 31 1 2 3
 Jan machine studies 8:00AM 8:00AM standard lattice 8:00AM R Stoupin (Claimed, No ESAF, U...
 Feb 7 8 9 10
 Feb standard lattice 8:00AM machine int... 8:00AM standard lattio
 Feb beamline start-up 8:00AM G Krejci (Cl... G Se
 Feb 14 15 16 17
 Feb standard lattice 8:00AM machine int... 8:00AM standard lattio
 Feb beamline start-up 8:00AM 8:00AM R Knight (Cl...
 Feb 21 22 23 24
 Feb standard lattice 8:00AM machine int... 8:00AM standard lattio
 Feb R Knight (Claimed... Support DE... G Tommasini (Claimed...

Edit Activity:
 Category: Beamtime Request
 Find: [] Prev Next

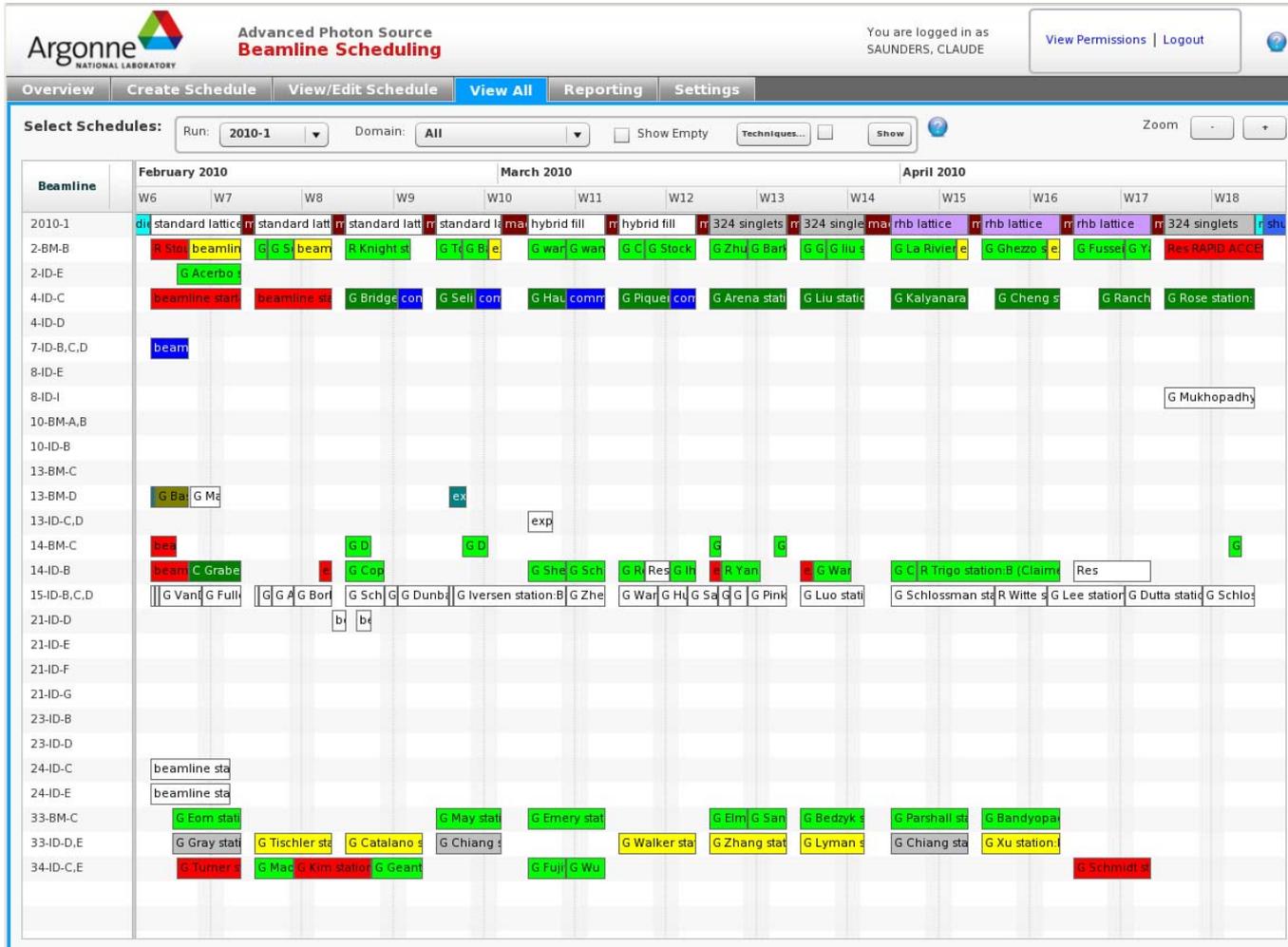
| Prop | PI | req/grt | sch | bl |
|-------|---------|--------------|-----------|-----|
| 13015 | Krejci | 3/3 shifts | 3 shifts | 1st |
| 11370 | Stock | 9/9 shifts | 12 shifts | 1st |
| 12656 | Fusseis | 9/9 shifts | 12 shifts | 1st |
| 12777 | Zhu | 6/9 shifts | 9 shifts | 1st |
| 12526 | wang | 15/15 shifts | 9 shifts | 1st |
| 20229 | liu | 9/3 shifts | 9 shifts | 1st |

Proposal: General User BTR: 49471
 Status: Claimed by 2-BM-B
 Title: Structural Reinforcement of Abalone Shell Around Respiratory Holes
 PI: Minna Krejci
 Inst: Northwestern University
 ESAF ID: [] Access: local
 Comment: []

Start Time: 02/10/2010 08:00 Color: []
 End Time: 02/11/2010 08:00 []
 Time Delta: 0 hours
 Utilization %: 100 [] time unused

Activity Activity Email
 Apply [Delete]

Current Screenshots (multi-beamline overview)



Scheduling Feature Status

- Completed
 - Scheduling of all APS-defined time
 - GUP, CAT, Staff, PUP, commissioning, set-up, start-up, non x-ray
 - Scheduling of beamline staff support
 - Fine-grained authorization
 - Customizable data visibility policy
 - Scheduling guidance, warnings, and statistics
 - Customizable automated scheduling emails
 - Management view of all beamline schedules
- To Do
 - Ongoing improvements driven by user feedback
 - Schedule printing
 - Reporting (Business Objects to be used)
 - Astheimer report
 - Beamline and User specific reports
 - Integration of beamlines with existing scheduling and mail-in handling



Important Project Issues

- Marketing project to beamlines
 - There still seem to be some beamlines surprised by the existence of this project.
 - Must emphasize 2010-1 is voluntary, but 2010-2 is not
 - How to handle approaching mandatory usage...
 - Make sure there aren't any significant unmet needs
- How to handle beamlines with existing scheduling system
 - Integration “library” supplied and documented
 - Must work with beamlines so they can submit schedule data programatically
- Communicating desired workflow
 - Beamlines must make sure ESAF ids are recorded for scheduled activities
 - All experiments must be preceded by a proposal and beamtime request
- Meeting everyone's reporting requirements
 - We will produce some number of “canned” reports
 - All others “self-service” using Business Objects report designer
- Managing requirements and features long-term



Scheduling System impact on legacy systems

- Building the scheduling system has pointed out some issues with existing systems...
- The definition of “beamline” is not the same everywhere
 - Scheduling system uses DOE definition of beamline
 - GUP system has different names, some of which actually imply multiple DOE beamlines (ex. 8-ID-XOR choice is actually 8-ID-I and 8-ID-E)]
 - ESAF system has completely different representation for a beamline, consisting of separate inputs for sector, source, and station (rather than a single pick-list)]
 - This needs to get straightened out for accurate reporting
- Multiple ways to refer to an ESAF
 - ESAF id simply refers to ESAF form filled out prior to posting
 - Equivalent to an LMS **document** – it can change over time
 - PEN # is another way to refer to an ESAF
 - Experiment id (a posted ESAF)]
 - Equivalent to an LMS **record** – snapshot which cannot change
 - Accurate reporting on schedules depends on accurate ESAF data entry



Policy issue raised by Scheduling System

- A given beamtime request (BTR) can request several beamline choices, but once “allocated” or “claimed” can only be scheduled on one beamline.
 - This is issue both for GUP BTRs (8-ID-I and 8-ID-E has some BTRs that they want to schedule on both)]
 - And for newer CAT BTRs (24-ID-C and 24-ID-E has some CAT BTRs that they want to be able to schedule on both)]
 - The only solution now is to have multiple BTRs created for one proposal, each with the respective beamline as 1st choice.
- This issue has always been present, but new mandatory requirement for CAT and Staff proposals is magnifying it.