

APS/Users Monthly Operations Meeting

B. Stephenson

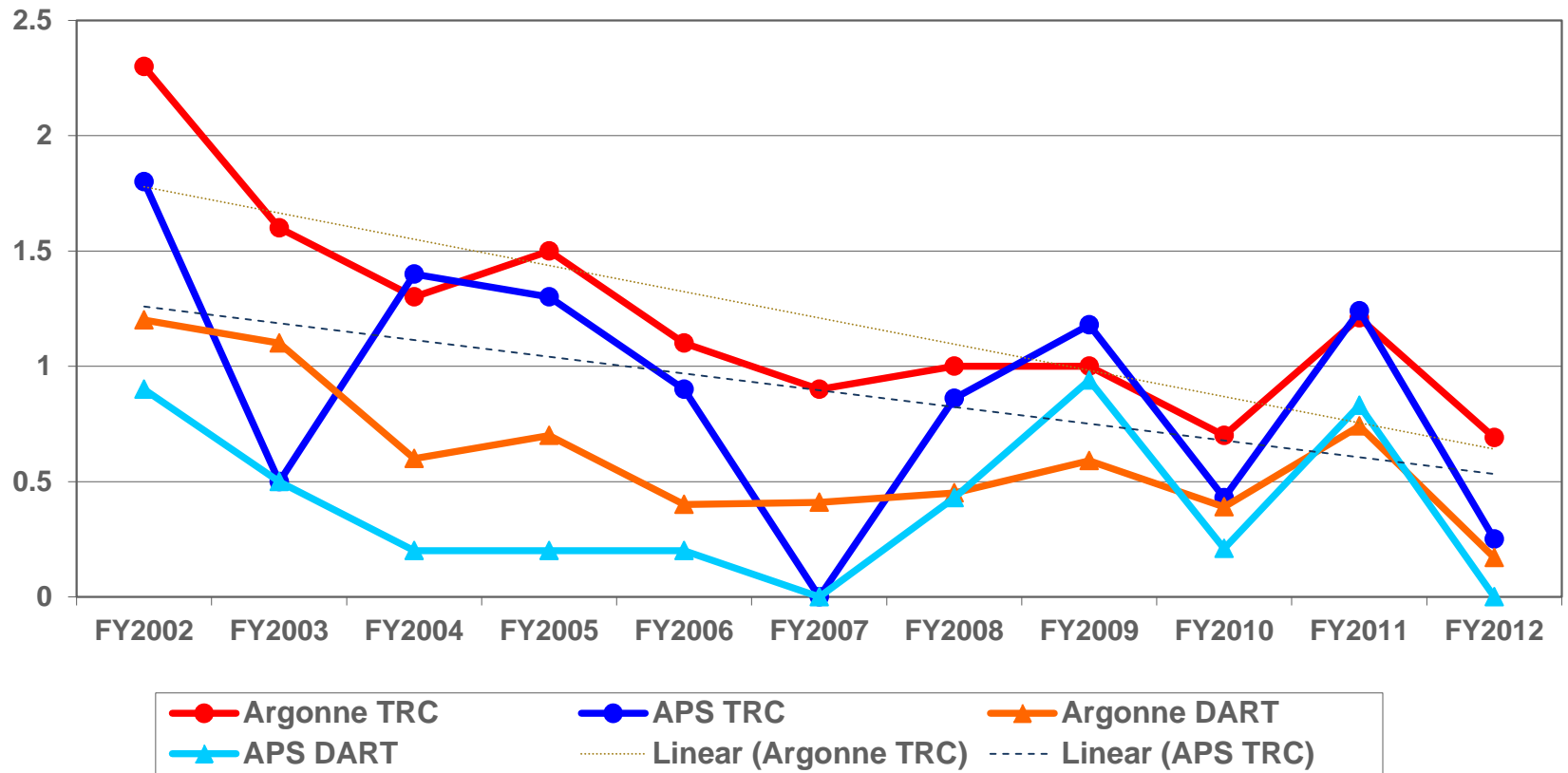
September 26, 2012

Agenda

- APS Update – Brian Stephenson
 - Safety
 - 150 mA Studies
 - New Buildings
 - DCS project (Dynamic Compression) progress
 - User Support Space Planning
 - Energy Showcase
- APS Upgrade Update – Jim Kerby
- Microcrystallography at the APS and Around the World
– Bob Fischetti



APS TRC & DART Rates (Estimated thru August 2012)



TRC = Total OSHA Recordable Case Rate per 200,000 Hours Worked

DART = Days Away, Restricted Duty, or Job Transfer Case Rate per 200,000 Hours Worked

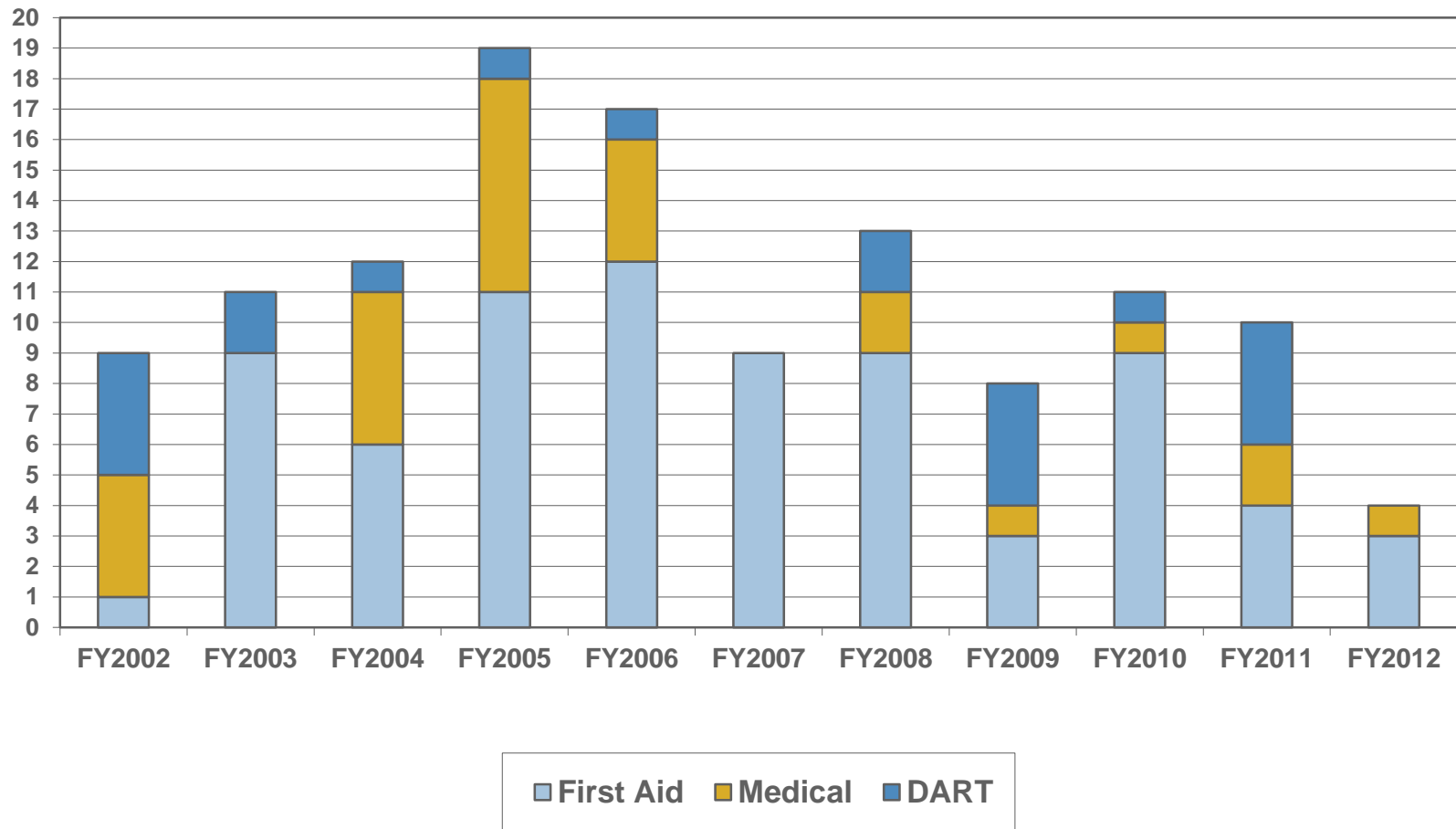
FY2002-4 APS Divs.

FY2005-8 SUF (APS Divs.+ IPNS)

FY2009-12 PSC (APS Divs. Only)



APS - Total Injuries + Number in Each Category



FY2002-4 APS Divs.

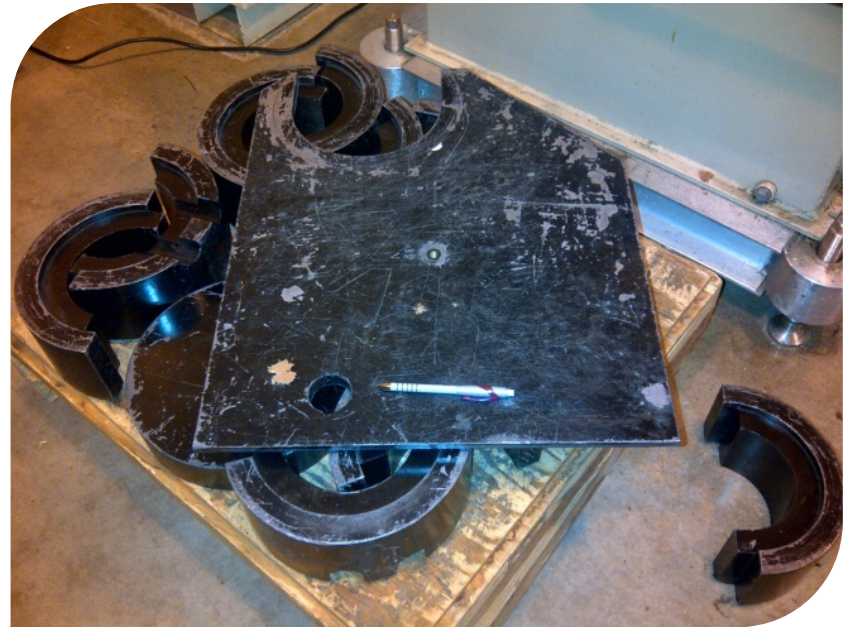
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FY2009-12 PSC (APS Divs. Only)



Near Miss

- APS employee was re-stacking shielding in accelerator
- 50-lb piece was bumped off edge of pallet and fell 3 feet to hit toe
- Safety shoe steel toe deflected blow and injury was avoided
- Procedure and equipment for restacking shielding is being revised to prevent recurrence
- Wear your safety shoes when working around heavy materials



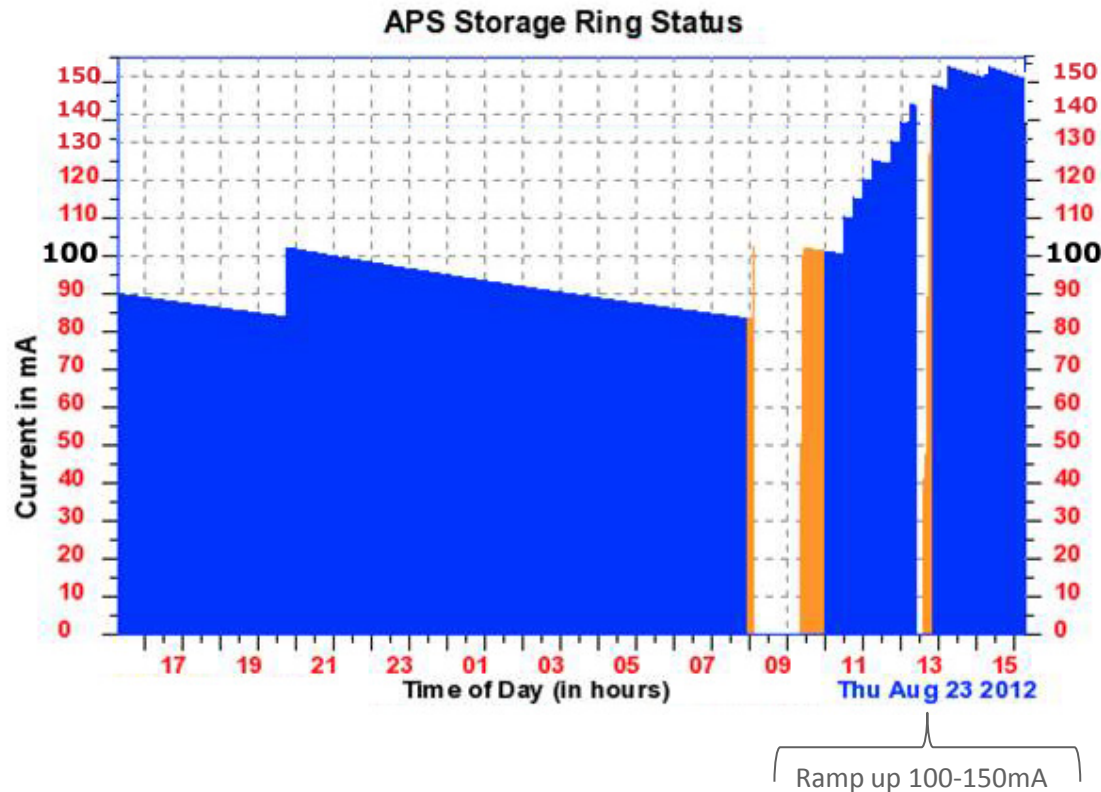
150-mA Study with User Participation

Objective:

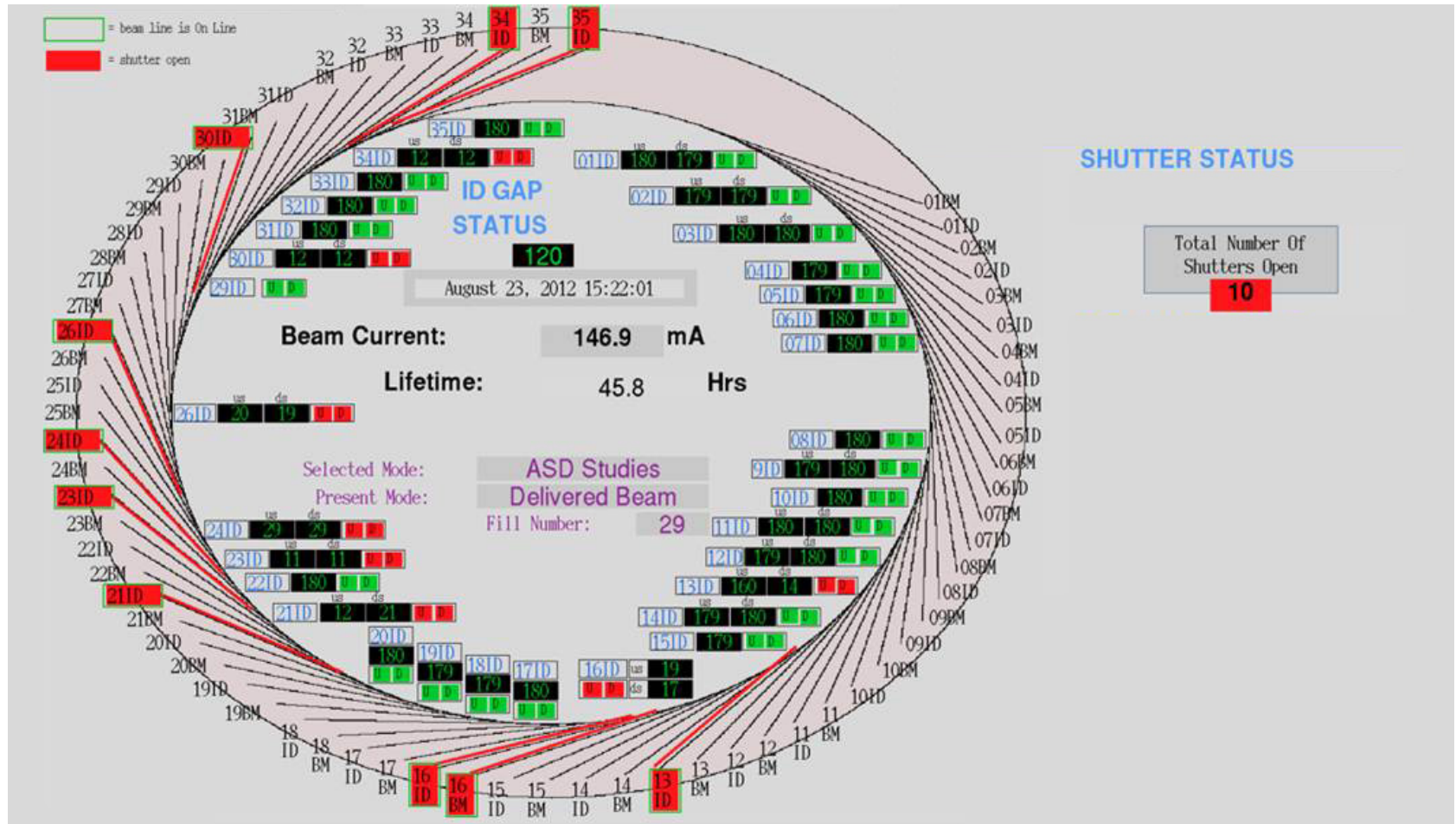
Allow Users to study the performance of their beamline optics up to 150 mA.

Criteria for participation:

Front End and Beamline Shielding components OK to operate up to 150 mA with no ID gap restrictions.
All other beamlines taken off-line with open ID gaps.



150-mA Study with User - Shutters open in red



Beneficial Occupancy for Bldg 400A this month

SPX support building inside ring near sectors 5-7 will provide space for:

- Cryogenic plant (cold box, helium and LN2 tanks, heat exchangers, compressors)
- Multiple klystrons
- Wells for testing superconducting RF devices



APCF Construction

Advanced Protein Crystallization Facility (APCF)

APCF Construction Milestones

Construction Start August 2012

Foundations December 2012

Structural Steel December 2012

Building Enclosure April 2013

Beneficial Occupancy Nov 2013

Final Completion April 2014

Live Web Cam

<http://apfcam1.aps.anl.gov/view/viewer_index.shtml?id=14388>



Slated to open in 2014

DCS MOU Ceremony - September 6, 2012



Pictured left to right: Prof. Yogendra Gupta PI – Institute of Shock Physics WSU, Dr. G. B. Stephenson – APS Director, Dr. Eric D. Isaacs – Laboratory Director Argonne, Dr. Chris Deeney – NNSA, Dr. Daryll DeWald – Dean, College of Arts and Sciences WSU, Dr. Keith LeChien - NNSA

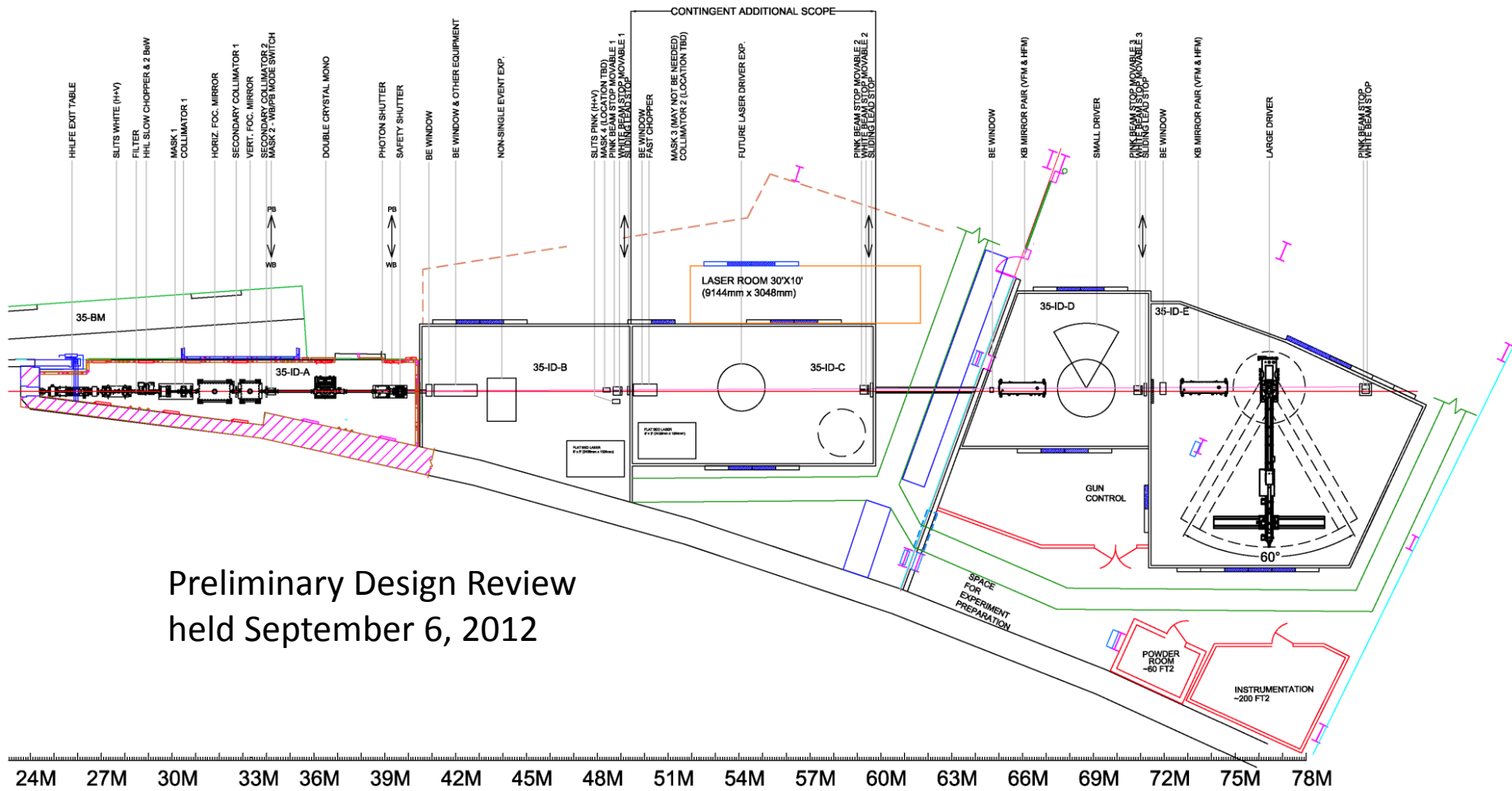


Sector 35 Being Cleared for DCS

- Diagnostics monitors will remain at 35-BM, diagnostics research will move from 35-ID to 30-ID



DCS Beamline Layout at Sector 35



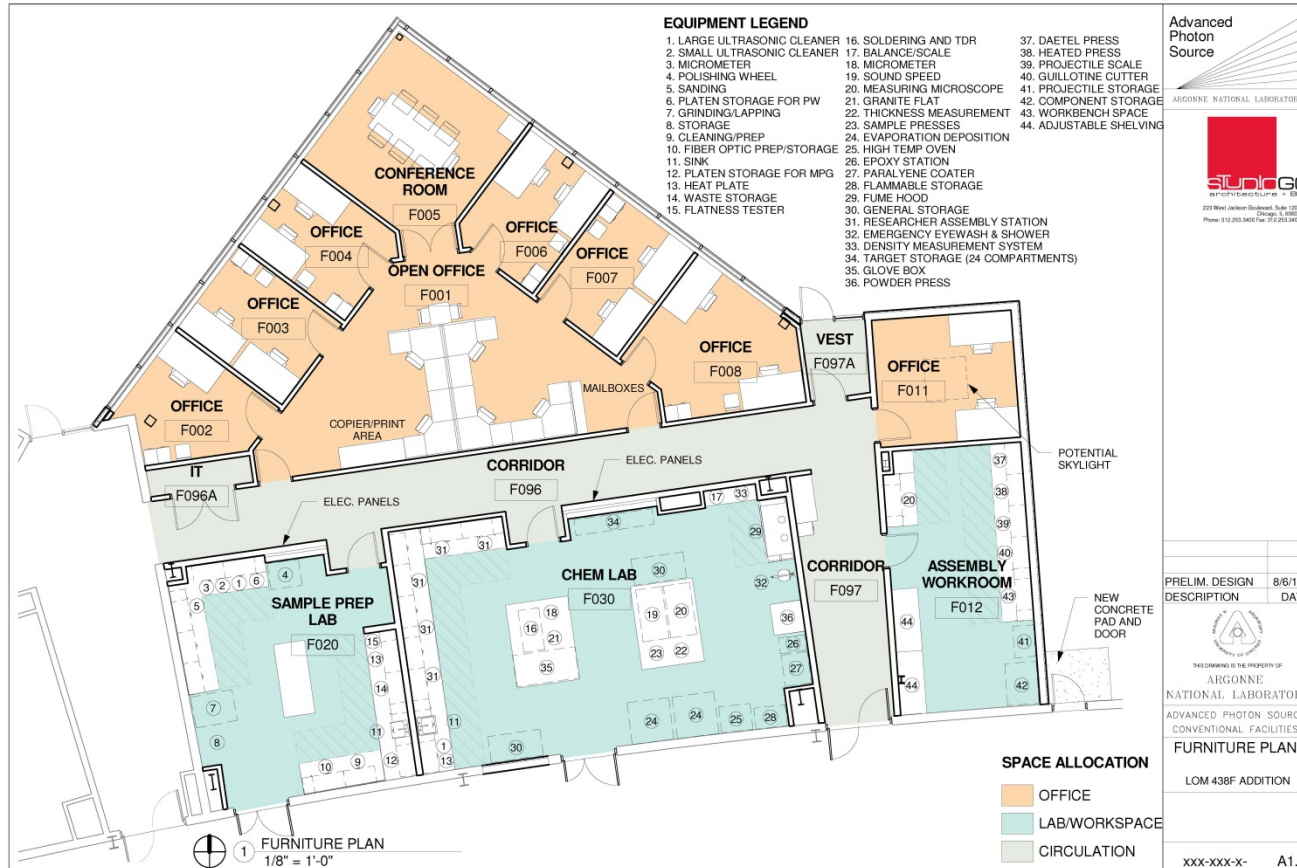
Preliminary Design Review
held September 6, 2012

DCS Project LOM 438F Pentagon

Planned
LOM 438F



DCS Project LOM 438F Pentagon



Dynamic Compression Sector (DCS) Project



APS User Support Space Planning

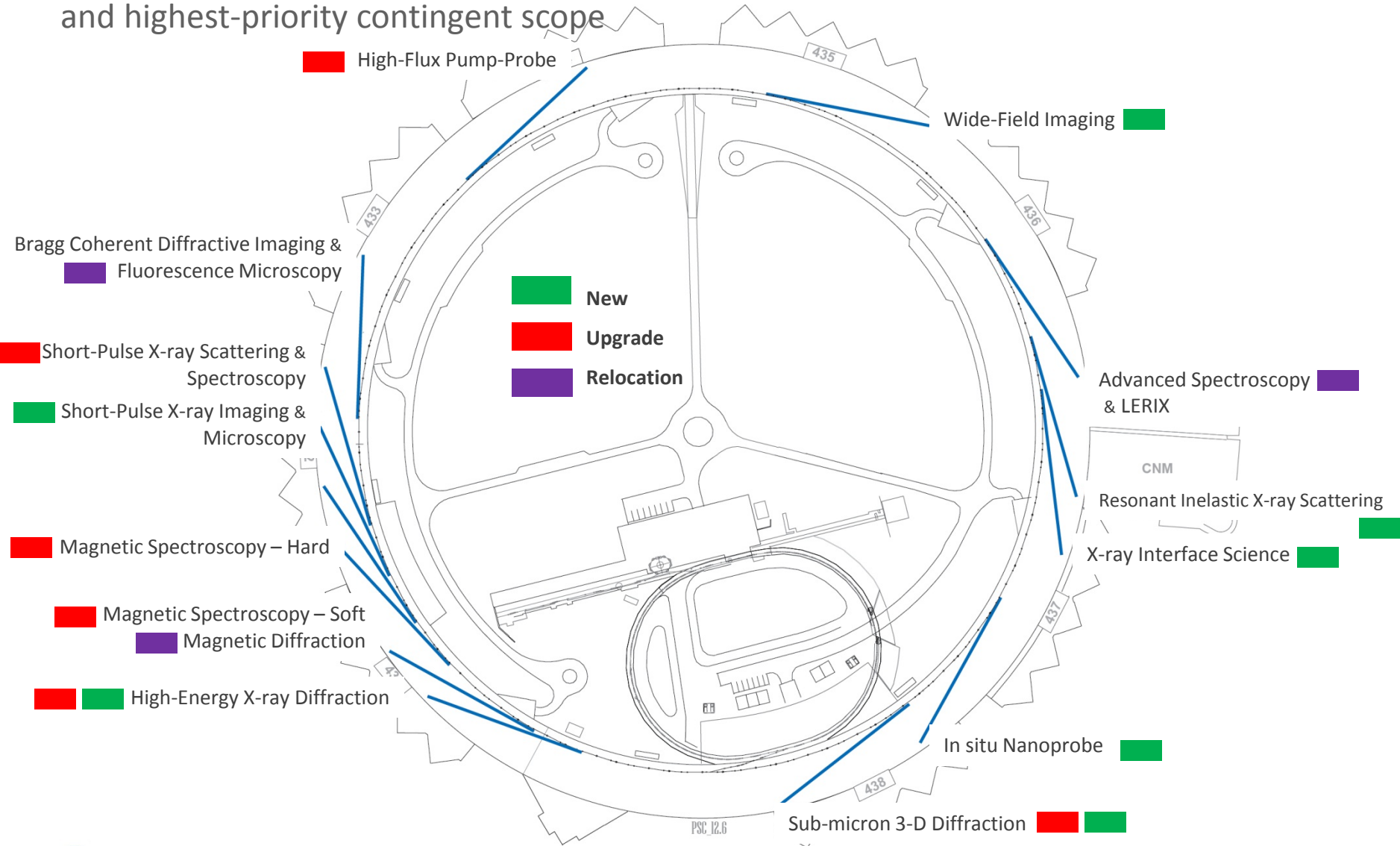
- Drivers for expansion of beamline office space:
 - Current LOM overcrowding (343 occupants, 290 capacity)
 - Accommodating NSLS-I to NSLS-II transition
 - APS Upgrade
- APS Roadmap completed in May 2012 gave planned locations of future beamlines and thus needed offices

	Current	2-3 years	End of APS-U	Beyond APS-U
Number of Beamlines	63	71	79	84
Number of Beamline Occupants	343	386	441	479



APS Upgrade Beamline Locations

Net increase of 11 new experimental stations in APS-U base and highest-priority contingent scope



Alternatives

- Need is for user support space directly adjacent to beamlines distributed around ring
- Vertical LOM expansion avoids costs of moving roadways, wetlands
- Creating a design for expanding LOM by LOM gives flexibility for future expansion as and where needed without redesign costs
- We are also considering a building south of CNM
- Argonne plans IGPP funding starting in FY13 to expand APS user support space
- Likely FY13 activities: build out interior of LOM 437, design new building next to CNM



Building Location Adjacent to APS, CNM



- Adjacent to several new beamlines and CNM



The APS/ANL Energy Showcase, September 15, 2012

- Estimated number of public attendees: 12,500 (per CEPA)
- Exhibits by all APS Divisions + Upgrade
- 134 APS staff manning exhibits, guides
- <http://www.youtube.com/watch?v=669AcEBpdsY>

