

Hall A Update

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6/4/13

Near term accelerator schedule – same as last meeting

- Accelerator Run II: Beam in hall 3/2014, or maybe as early as 1/2014 (?)
 - > 1.1 GeV/pass, 3 pass spin-up to Hall A
 - up to 5.5 pass to D by ~5/14
 - Shut down 5/3/14
- Accelerator Run III: 8/30/14 – 12/1/14
 - CD4A milestones
 - 12 GeV 5.5 pass capable *installed*
 - 11 GeV 5 pass to A, B, C *installed*
 - > 2 nA 2.2 GeV single pass *transported*
 - Plan
 - E > 2 GeV/pass, 10 GeV to Hall D
 - 2 Hall operation
- Accelerator Run IV: 2/13/15 – 6/1/15
 - E > 2 GeV/pass, 2 hall operation
 - CD4B Halls B,C,D operational, > 6, 6, 10 GeV
 - *Schedule rebaseline likely – won't effect Hall A or accelerator*
- Physics Run I: 8/30/15 – 12/23/15
 - E > 2 GeV/pass
- Physics Run II: 2/6/16 – 6/25/16
- Physics Run III: 9/12/16 – 12/22/16
- Spring, fall, spring, fall runs continue....


Rebaselining might carry some changes, but unlikely to effect SBS

Hall A Projected Experiment Schedule as of 8/2012

- available on Hall A wiki

Run Period	February - May	August - December	February - June	August - December	February - June	September - December
2014	GMp / DVCS - I (APEX)	GMp / DVCS - I				
2015			$^3\text{H}/^3\text{He}$ (A_1^n)	PREX (APEX)		
2016					A_1^n (SBS) (DVCS-II) (APEX)	SBS (A_1^n) (DVCS-II) (APEX)

Experiments in parentheses represent potential schedule changes.

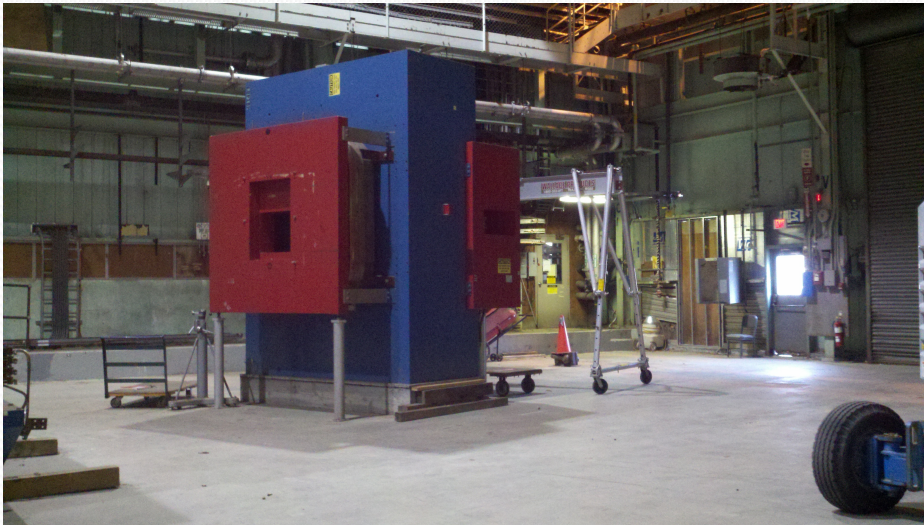
SBS

MOLLER, SOLID...?....

General Hall near term thoughts for SBS

- Hall A should see first beam in less than ~1 year 😊
 - Upgrade and infrastructure work underway
 - Beamline – energy, current, position, polarimetry,...
 - HRS's – detector upgrades and general refurbishing
 - *Many things to do and help appreciated!*
- Experiments using ~standard equipment scheduled initially
 - Allows for parallel efforts preparing for new equipment (^3He target, PREX, SBS,.....MOLLER,.....)

SBS Current Activities

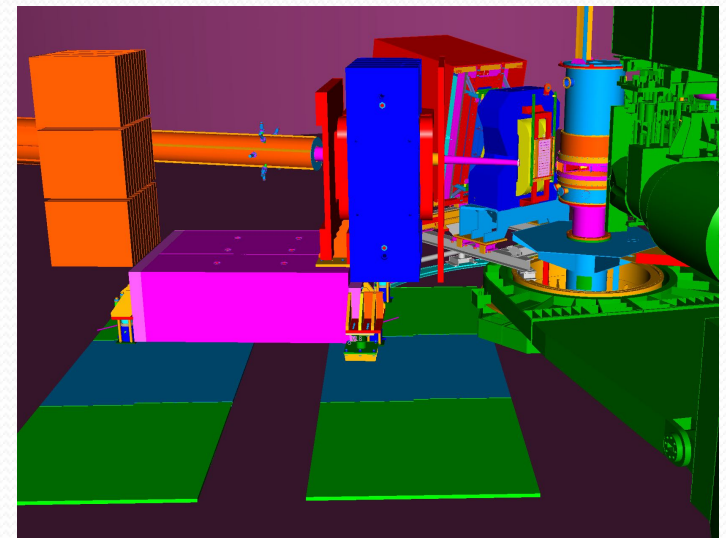
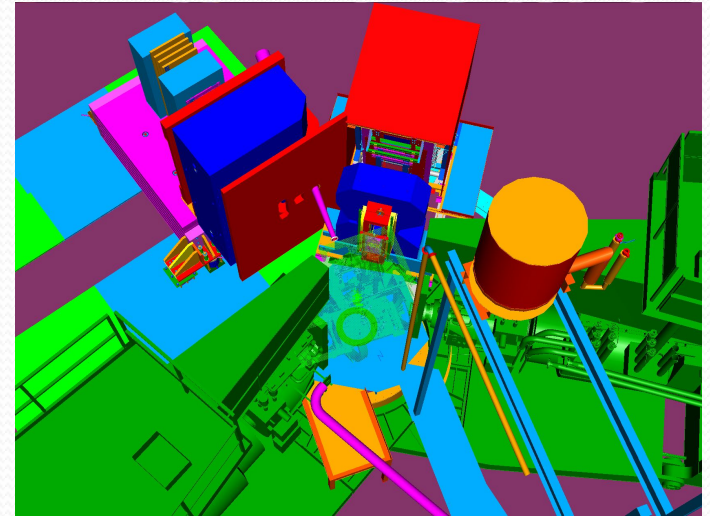
- 10/1/12 SBS “Program” started with DOE
 - Subset of the proposed physics program (magnet and GEMs)
- Hall A currently supporting “pre-R&D” and SBS-related work
 - ^3He target development (Gordon Cates)
 - GEM tracker prototyping at UVA (Nilanga Liyanage)
 - Hadron calorimeter (Gregg Franklin) Fermilab scintillator *purchase approved*



SBS Design and Engineering (See Robin's talk!)

G_E^n

- Yoke modification drawings ~30% complete
- Design work ongoing for magnet counter weight support, will incorporate movement of support to relocate magnet
- Design details of rollers, jack mounts, magnet bracket, floor plates ongoing, ~65% complete
- Detailed drawings of new coils ~25%
- Power supply specification completed, *in procurement*
- Layout and design of shielded beampipe and vacuum snout ~20%
- Defining field clamps and design of clamp supports ~15%
- Detector support design ~20%
- Mid-June delivery expected for magnet from BNL



G_M^n

Other Thoughts

- New PAC procedures for no-additional-beamtime-needed requests
 - Does the SBS collaboration anticipate experiments like this?
 - If so, suggest working on a process for review



Looks on track for first SBS run in 2016 or 2017!