

March 8, 2013 10:00 in Snakepit

0. Establish ReadyTalk Connections

1. News – Steve

PX Snowmass Whitepaper submitted

HEPAP Facilities Subpanel Report posted

http://science.energy.gov/~media/hep/hepap/pdf/Reports/HEPAP_facilities_letter_report.pdf

“The development of Project X was endorsed by the 2008 P5 report, which recommended an R&D program in the immediate future to design a multi-megawatt proton source at Fermilab. The importance and breadth of the research program that it enables and enhances, leads the Project X accelerator facility to be classified as *absolutely central*. Although R&D is still required for the spallation target needed by some experiments, all stages of the Project X accelerator facility are *ready to initiate construction*.”

Project X experiments that compose the research program range from important to absolutely central, but scientifically the Project X research program as a whole is classified as *absolutely central*. Being in the planning phase, the construction readiness of the Project X research program is classified as *mission and technical requirements not yet fully defined*, although some experiments are beyond this phase.”

Upcoming Events

Proton Accelerators for Science and Innovation April 3-5, RAL
Fermilab-UK Collaboration

SLHiPP (ESS/SPL) Collaboration Meeting April 17-18 Belgium

Pre-Snowmass Capabilities Frontier April 17-20, BNL
High Intensity Secondary Beams Driven by Protons Subgroup
<https://indico.bnl.gov/conferenceDisplay.py?ovw=True&confId=610>

Project X Writers Meeting April 24, Fermilab

Pre-Snowmass Intensity Frontier Working April 25-27, ANL
Group
<https://indico.fnal.gov/conferenceDisplay.py?confId=6248>

| | |
|---|------------------------------------|
| 2013 Kaon Physics International Conference | April 29-May 1, Ann Arbor |
| Charged Lepton Flavor Violation Workshop | May 6-8, Lecce |
| IPAC2013 | May 13-17, Shanghai |
| PX Spring Collaboration Meeting?? | Fall |
| Pre-Snowmass Opportunities in Underground Physics (ISOUPS) | May 24-27, Asilomar |
| Pre-Snowmass Theory Meeting for Energy, Cosmic, and Intensity Frontiers | May 29-31, Santa Barbara |
| Pre-Snowmass CPAD Meeting | May 30-June 1, LBL |
| Fermilab Users Meeting 2 hour block PX presentation (accel+phys) | June 11-12, Fermilab |
| TTC Topical Workshop | June 12-14, Cornell |
| CSS (Snowmass2013) | July 29-August 10, UMinnesota |
| Accelerator Applications (AccApp13) | August 5-8, Bruges, Belgium |
| DPF Meeting | August 13-17, Santa Cruz |
| NuFact | August 19-24, Beijing |
| 3 rd Workshop on the Physics of Fundamental Symmetries and Interactions at Low Energies | September 9-12, PSI |
| SRF2013 | September 22-27, Paris |
| PAC13 | September 29 – October 4, Pasadena |
| IIFC Annual Meeting | November 11-16, Mumbai |
| IBIC (beam instrumentation conference) | Oxford, September 16-19 |
| CD-0 | TBD, Germantown |

2. XMAC Meeting Summary

<https://indico.fnal.gov/conferenceDisplay.py?confId=6482>

[XMAC1 Closeout Report.doc](#)

3. Pre-CD-3 Deliverables

We are working with DOE to define what it will take to be ready for a construction start in FY18. Associated with this are a list of deliverables – one set is associated with requirements mandated by DOE413.3b; a second set is associated with R&D deliverables aimed at mitigating (technical and cost) risk. The table below is extracted from the document we are currently working with.

| Deliverables | Date |
|--|-------------|
| DOE413.3b | |
| Mission Needs Statement | Q4FY13 |
| Conceptual Design Report | Q1FY15 |
| Risk Management Plan | Q1FY15 |
| Preliminary Hazard Analysis Report | Q1FY15 |
| Preliminary Design Report | Q2FY16 |
| Hazard Analysis Report | Q2FY16 |
| Final Environmental Impact Statement | Q2FY16 |
| Final Design Report | Q3FY17 |
| Hazard Analysis Report (Updated) | Q3FY17 |
| Construction Project Safety and Health Plan | Q3FY17 |
| R&D Program | |
| HB650 Cavity (8, TESLA shape) Vertical Test (US) | Q2FY15 |
| HB650 Dressed Cavity (3) Horizontal Test (US) | Q2FY16 |
| HB650 Dressed Cavity (4) Horizontal Test (India) | Q3FY17 |
| LB650 Dressed Cavity (3) Horizontal Test (US) | Q2FY17 |
| LB650 Dressed Cavity (2) Horizontal Test (India) | Q4FY17 |
| HB650 Cryomodule Design (US, India) | Q4FY15 |

| Deliverables | Date |
|---|--------|
| HB650 Cryomodule Power Test (US) | Q4FY17 |
| 650 MHz rf Power Test (India) | Q3FY16 |
| SSR1 Dressed Cavity (2) Horizontal Test (India) | Q1FY15 |
| SSR1 Cryomodule Power Test (U.S.) | Q4FY16 |
| SSR2 Dressed Cavity (2) Horizontal Test (India) | Q4FY17 |
| SSR2 Cavity (2) Vertical Test (US) | Q3FY17 |
| SSR2 Dressed Cavity (1) Horizontal Test (US) | Q4FY17 |
| 325 MHz rf Power Test (India) | Q3FY16 |
| HWR Cryomodule Test with Beam | Q2FY18 |
| Front End Systems Test (warm components) | Q1FY17 |
| H- Injection System Complete Design | Q2FY17 |
| High Power Target Complete Design | Q2FY17 |
| International Governance | |
| Collaboration Governance Plan | Q4FY13 |

4. Next Steps on RDR

I would like to have an update of the RDR posted by May 15:

Section authors: Please read your sections and any other sections that bear on what you wrote. Please submit mark-ups (track changes in Word, feel free to extract your section from the full document) by April 30 to:

Chapter I: Steve

Chapter II: Steve

Chapter III: Sergei, cc Steve

Chapter IV: Marc, cc Steve

Chapter V: Marc, cc Steve

Appendices: Steve

5. Next Steps on Cost Estimate – Marc

Plan to update the cost estimate:

1. Define scenarios (e.g. stage 1->2->3, stage 1&2->3, stage 1&2&3)
2. Define scope
 - a. Experimental interfaces (e.g. spallation, muSR, mu2e, kaon)
 - b. CD-4 definition
 - c. Treatment of R&D vs. construction
 - d. Spares policy
 - e. Decommissioning policy (e.g. removing TeV magnets)
3. Update WBS
 - a. Divide for stages
 - b. Add Booster
 - c. Review Experimental section
 - d. Review Installation
4. Assign Estimators
5. Distribute BOE forms (will be used for brief narrative only and have accompanying spreadsheets)
6. Generate estimates including considerations for time phasing
7. Collect and aggregate costs
8. Value engineering
 - a. Collect and analyze VE proposals
 - b. Take credit for in-kind deliverables, reuse of prototypes where appropriate

6. AOB