

Lab Status / AEM Meeting Notes

Monday April 23, 2018

<https://indico.fnal.gov/event/16912/>

Safety Incidents:

- None reported.

Accelerator (April 17 - 23):

- NuMI: 1.85E19 POT. Running at >720kW (w/o switchyard).
- BNB: 0.81E19 POT.
- Muon: 4.77E18 POT.
- MTest: 93.1 hours.
- MCenter: 0 hours.
- Booster & MI tuning continues.
- Muon g-2: Projection curves revisited.
- SY120: Meson Test operating. Power supply (HP3DS) bus duct fault repaired last Tuesday.
- PIP-II Injector test: starting up. Up to 5mA, 1.2ms 120Hz.
- FAST: IOTA installation under way. ORC for dipole PS likely on Tuesday.
- LCLSII Cryomodule F1.3-09 testing complete; warmed up. Cryo plant repairs underway.
- Schedule: <http://www-ad.fnal.gov/ops/schedule.html>

MicroBooNE:

- POT weighted uptime 96%

MINERvA (April 12-17):

- Uptimes: 98.3% (97.6% with MINOS ND).

NOvA:

- Uptimes: ND/FD = 99.9%/98.2%

Muon g-2:

- Increase in kicker voltage and improved injection parameters
- Positrons/fill now at ~50 % of TDR
- Some beam-off downtime last week
- Now taking data with high efficiency
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PPD:

- CMS: First collisions in 2018 with stable beams recorded last week.
- Mu2e Solenoids: TS first article warm tests complete and moved to HAB. Progress on other activities continues.

- Mu2e Reviews: Mini-review for the commissioning Target on April 24th; A CRR for CRV modules, electronics and installation on May 31. DOE mini-IPR to be held in June 12th. Solenoids and Tracker are part of the review.
- Astro: Top “ring” and focus cage for DESI arrived at the Mayall Telescope.
- Test Beam: CMS (T992) finished data taking. ATLAS Pixels (T1224) taking data. T1044 to return this Wednesday.
- MCenter: Installing vacuum pipe for NOvA test beam.
- EE: Jim Hoff gets a US patent on “Time Division Multiplexing Data Bus”; Terry Shaw at CERN reviewing protoDUNE SP status.
- Custom Detector Technologies: Optical Fibers facility prepared for quartz fiber polishing work request by CMS; ARAPUCA coatings R&D at Thin Films.

ND:

- SBN: All the remaining ICARUS cold shield components have arrived.
- SBND: TPC anode plane wiring in progress both in UK and US.
- protoDUNE – Five APAs now in the SP cryostat. APA #6 moved into the cryostat after tension testing and integration with photon detectors and cold electronics. Cold test for APA#5 completed and will be moved to the cryostat on April 24. Routing of cabling and testing of connections underway. All TPC construction now complete; work remains on instrumentation.

TD:

• **MAGNETS**

- (i) HL- LHC, AUP – Coil fabrication for LHC inner triplet quads progressing well. Manufacturing and Inspection Plan still not approved by CERN. So coil winding on hold. Short magnet quench test this week.
- (ii) LCLS II – Issues with bonded heat-sinks with SPQA129, returned to vendor. SPQA130 prepared for test.
- (iii) Mu2e – Warm tests of first TS production module proceeding. Second dish head for the TS test facility will have high current tests.
- (iv) G-2: outer winding for new inflector in final stages.
- (v) MDP 15-17 T dipole R&D - Lead splicing on hold due to safety issues with the soldering cart wiring.
- (vi) Accelerator Support – Booster solenoid winding complete.

• **SRF**

- (i) R&D: Quantum Computing measurement. High Q studies and Plasma processing continues.
- (ii) LCLS-II: Retro-fit BPM procedure approved by SLAC. CM tests progressing.
- (iii) PIP-II: Spoke cavity work continues.
- (iv) LARP: One RF deflecting cavity ready for test.

- **Cryogenic Sector**

- (i) PIP-II, LCLS-II and Mu2e procurements. LCLS DOE review May 8-10.
- (ii) Sub-kelvin cryogenic activities for SuperCDMS, ADMX, Nexus & Quantum Lab. Several reviews coming up.

Computing Operations:

- CCD: Good week overall. Disk filled up on Saturday 4/21 suspending primavera DB operations.
- SCD: Good week. Cluster drained 3 times last week due to lack of demand. NOvA pegged network offsite transfers on Sunday. g-2 backlog of tape requests being investigated.

Office of Communication:

- The Villalabos Brothers contemporary Mexican music
- Story Collider event in May.
- All Hands Meeting April 27.

Directorate:

- The Governor General of Canada will be visiting the Lab this week Thursday.

AOB:

- None