

Lab Status / AEM Meeting Notes

Monday April 2, 2018

<https://indico.fnal.gov/event/16804/>

Incidents:

- None reported.

Accelerator (March 23 - April 2):

- NuMI: 1.93E19 POT. Running at >710kW (w/o switchyard).
- BNB: 0.77E19 POT.
- Muon: 3.06E18 POT.
- MTest: 69.0 hours.
- MCenter: 0 hours.
- Booster & MI tuning continues. Muon Campus: tuning & studies + g-2 ops.
- PIP-II Injector test: starting up. Up to 5mA, 1.2ms 120Hz.
- FAST: IOTA installation under way.
- LCLSII Cryomodule F1.3-09 testing completed.
- Schedule: <http://www-ad.fnal.gov/ops/schedule.html>

MicroBooNE:

- POT weighted uptime 97%

MINERvA (March 22-28):

- Uptimes: 98.3% (86.1% with MINOS ND).

NOvA:

- Uptimes: ND/FD = 100%/99.9%
- Extended downtime, due to issues with our timing system, during afternoon/evening on Sunday

Muon g-2:

- Data taking & 2 trolley runs.
- Uptime: 88%

CMS Monthly Report:

- LHC has started injecting protons – beam commissioning in the next weeks
- Goal for this year: 68fb-1.
- CMS closed and ready for collisions.
- Cosmic rays collected last month at 0T. Magnet now at 3.8T.
- Working on Phase 2 upgrades.

PPD:

- Mu2e Solenoids: PS/DS: General Atomics completed insertion of PS/DS Model Coil. Next steps at GA are routing leads and LN2 cold test. Furukawa-Brazil completed conforming and cold working final two spare unit-lengths of PS conductor. Fermilab is finishing room-temperature electrical and magnetic testing of first TS production unit from ASG (Genoa).
- Mu2e Accelerator: Received single proposal for Heat & Radiation Shield machining/vacuum vessel work . The bid was significantly above the budgeted amount. Cost drivers seem to come from very tight specifications. Mu2e experts agreed some specs unnecessarily tight. Vendor will submit an updated proposal.
- Astro: (i) DES. Y6 proposal submitted to NOAO. Expect 52 night-equivalents 8 September to 8 January (ii) DESI: Mayall telescope at Kitt Peak underdoing disassembly in preparation for DESI installation.
- Test Beam: CMS Timing (T1409) continues data taking. ATLAS Pixels (T1224) will take data during breaks with CMS timing.

ND:

- DUNE: The 4th US APA (6th and final for ProtoDUNE) is complete & crated
- At ProtoDUNE, APA5 is in the clean room. The three sets of top/bottom field cages of the first drift volume have been deployed.
- LArIAT: Analysis work on LArIAT hadron cross sections continues.
- SBN: DOE hold on welding the doors and rigging the ICARUS cold vessels still in place. Updated dates have been provided by Superior Crane for the upgrade of the SBN FD building cranes to 33 tons. They plan to be on-site for installation starting on April 30.
- The second SBN joint analysis workshop was held in Padova, Italy March 19-23.

TD:

- **MAGNETS**
 - (i) HL- LHC, AUP – Coil fabrication for LHC inner triplet quads continues.
 - (ii) LCLS II – test and qualification of the quadrupoles continues.
 - (iii) Mu2e – Coils for next TS unit completed.
 - (iv) G-2: outer winding for new inflector in progress.
 - (v) MDP 15-17 T dipole R&D - Coil fabrication for 15 T dipole continues.
 - (vi) Accelerator Support - NOvA M1 dipole dipole integral field measurements completed.
- **SRF**
 - (i) R&D: Quantum Computing measurement , High Q studies and Plasma processing continues.
 - (ii) LCLS-II: Quality Assurance Audit completed. Progress with CM02-CM13.
 - (iii) PIP-II: Spoke cavity work continues.
- **Cryogenic Sector**
 - (i) PIP-II, LCLS-II and Mu2e procurements.

- (ii) HL-LHC AUP: working on stand 4 upgrade tasks.
- (iii) Various sub-kelvin cryogenic activities for SuperCDMS, ADMX, Nexus & Quantum Lab.

Computing Operations:

- CCD: Good week.
- SCD: Good week.

Office of Communication:

- Nothing to report.

Directorate:

- Nigel in Soth Dakota at SURF operations review.
- CMS HL Directors Review this week.

AOB:

- None