

**Lab Status / AEM Meeting Notes**  
Monday March 26, 2018

<https://indico.fnal.gov/event/16729/>

**Incidents:**

- None reported.

**Accelerator** (March 19-26):

- NuMI: 1.52E19 POT. Running at >710kW (w/o switchyard).
- BNB: 0.67E19 POT.
- Muon: 1.82E18 POT.
- MTest: 76.5 hours.
- MCenter: 0 hours.
- Booster & MI tuning continues. Muon Campus: tuning & studies + g-2 ops.
- PIP-II Injector test: starting up.
- FAST: IOTA installation under way.
- LCLSII Cryomodule F1.3-09 testing.
- Schedule: <http://www-ad.fnal.gov/ops/schedule.html>

**MicroBooNE:**

- POT weighted uptime 95.6%
- DAQ stability tests during shutdown with increased CR trigger rate.

**MINERvA** (March 15-21):

- Uptimes: 97.3% (96.2% with MINOS ND).

**NOvA:**

- Uptimes: ND/FD = 100%/99.5%

**Muon g-2:**

- Experiment ran in 16 pulse mode (1.4s MI cycle) over weekend.
- Consistent trolley run data, good field uniformity.
- Taking physics data.

**PPD:**

- CMS: Magnet ramping. Phase-1 upgrade: HE installed and working. HL-LHC upgrade: CD-1 Diurector's Review April 4-6.
- Mu2e: Solenoid & Tracker construction progressing. For CRV, 68% of scintillator now extruded.
- Astro: (i) DES. Successful maintenance at telescope last week. (ii) LSST: Telescope construction progressing. Preparing for large image simulation. (iii) SuperCDMS: Prototype completed at Lab G for source calibration system. (iv) SENSEI: testing packaging prototypes at SiDeT.

- Test Beam: T1044 (sPHENIX calorimetry tests) & T1450 wrapping up. CMS Timing (T1409) and ATLAS Pixels (T1224) will install this week.
- Custom Detector Technologies: Scintillator R&D work and progress with thin films for protoDUNE R&D.

**ND:**

- LArIAT: Preparing for SBND vertical slice test in May.
- DUNE: LBNF/DOE IPR last week. LBNF/DUNE funded at 95M\$ in FY18.
- protoDUNE: The 4th US APA (6th for ProtoDUNE) complete. At ProtoDUNE, APA4 is in the cold box.
- Arapucas: finished coatings and coating stability studies.
- SBN: DOE hold on welding the doors and rigging the ICARUS cold vessels still in place. Setup of the assembly area for the ICARUS cold shields is in progress in the MINOS building. Setup of the SBND APA wire winding facility at Yale has been completed.

**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 – First Transport Solenoid production module in-house.
- (iv) G-2: Baking the spare MSE core is complete.
- (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 5 GHz cavity tested. Nb3Sn group continues cavity preparation and coating.
- (ii) LCLS-II: New BPM assembly procedure & hardware continues to be successful following thermal cycle. Quality Assurance Audit in progress.
- (iii) PIP-II: Spoke cavity work continues.

• **Cryogenic Sector**

- (i) PIP-II, LCLS-II and Mu2e procurements.
- (ii) HL-LHC AUP: studying impact of performing all or partial magnet training at Fermilab instead of BNL.
- (iii) Meson Detector Building: Spoke cavity testing.
- (iv) Various sub-kelvin cryogenic activities for SuperCDMS, ADMX, Nexus & Quantum Lab.

**Computing Operations:**

- CCD: Thursday 3/22. Windows security patches caused problems: (i) Cascading series of issues, especially with Printing and Listserv. (ii) Patches were successful in test systems – test environment to be expanded.

- SCD: No report.

**Office of Communication:**

- June 29: Daughters & Sons to Work Day.

**Directorate:**

- Omnibus budget passed, signed and looks good for DOE-OHEP.

**AOB:**

- None