

## Lab Status / AEM Meeting Notes

Monday March 12, 2018

<https://indico.fnal.gov/event/16639/>

### Incidents:

- Several PPD incidents. (i) An employee hurt her arm when wind caught door she was opening to enter D0 Outback building. Injury minor, but a splint was required, so it is reportable. (ii) A user at the testbeam had trouble seeing road in dark and was involved in vehicle collision. There were injuries. No details at this time. (iii) An employee at Lab A was stung by a wasp.

### Accelerator (March 5-12):

- NuMI: 1.94E19 POT. Running at >710kW (w/o switchyard).
- BNB: 1.16E19 POT.
- Muon: 50.9 hours.
- MTest: 90.5 hours.
- MCenter: 11.5 hours.
- Booster & MI tuning continues. Muon Campus: tuning & studies + g-2 ops.
- Next scheduled downtime Tuesday March 20.
- PIP-II Injector test: starting up. Working to establish beam to beam valve.
- FAST: IOTA installation under way.
- LCLSII Cryomodule F1.3-09 testing.
- Tritium mitigation project: plans for BNB canopy and berm stabilization work to reduce by 70% amount of water needing expensive disposal. Starting in 2-3 weeks. No BNB during concrete work – estimated to be 2 day shifts.
- Schedule: <http://www-ad.fnal.gov/ops/schedule.html>

### MicroBooNE:

- POT weighted uptime 96%
- Ongoing analysis workshop at Columbia Univ.

### MINERvA (March 1-7):

- Uptimes: 98.3% (98% with MINOS ND).
- New paper: Phys. Rev. D97, 052002

### NOvA:

- Uptimes: ND/FD = 98.1%/98.0%

### Muon g-2:

- Commissioning continues.

- Recovering from quad system failure. Pumped down & quad conditioning in progress.
- Search & secured Saturday, re-established beam.

**PPD:**

- CMS: FPIX detectors reinstalled. Global cosmic run starts March 5.
- Mu2e Solenoid experts, Contract officer & Project management in Genoa to meet with ASG & discuss Transport Solenoid contract/changes. Expect the TS first unit to be delivered to Fermilab by mid-to-late week. PS/DS & CRV fabrication progressing.
- Astro. Several people attending SnoPAC - planning future surveys for 2020's in prep. for upcoming Decadal Survey.
- EDIT school in progress.
- Test Beam: T1441 and T1439 finished over weekend. T1044 & T1429 continue data taking. T1450 will install this week.

**ND:**

- DUNE: Preparations for the DOE IPR, 20-22 March, underway.
- protoDUNE: APA4 is expected to be moved into the cold box this week. Winding of the 4th US APA is in process at University of Wisconsin. Delivery of the UK APA is anticipated on 16 March. Closing of Temporary Construction Opening scheduled to start 30 April.
- SBND: Technical Board approved two proposals for R&D light detection systems to be included along with PMT system – (i) TPB coated light-guide bars readout with SiPMs, (ii) other is the ARAPUCA light trap system. The TB also accepted Commercial-off-the-shelf (COTS) ADC solution for the TPC readout.

**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 compete.
  - (iv) G-2: Outer coil winding of the inflector started.
  - (v) MDP 15-17 T dipole R&D - Coil fabrication for 15 T dipole continues.
- **SRF:**
  - (i) R&D: Nitrogen infusion studies continues. Furnace trouble shooting/improvements in progress.
  - (ii) LCLS-II: 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 resource loaded schedule submitted.

- (iii) Meson Controls Project underway.
- (iv) Various sub-kelvin cryogenic activities for SuperCDMS, ADMX, Nexus & Quantum Lab.

**Computing Operations:**

- CCD: Tuesday 3/6. Everbridge test uncovered issues. Everyone should log into Everbridge and check their account. Thursday 3/8. LHCOPN primary & secondary links cut – tertiary link continued to work. Saturday 3/10. Com center had issues with some critical phone numbers. ATT fixed bad line Monday.
- SCD: Good week. Continued work with experiments to address inefficiencies by improving workflows.

**Office of Communication:**

- Frugal Science lecture Friday evening.
- Artist in residence 2<sup>nd</sup> visit to Fermilab

**Directorate:**

- Nigel back from UK.
- Annual budget briefing in Germantown on Friday.

**AOB:**

- None