

## Lab Status / AEM Meeting Notes

Monday October 9, 2017

<https://indico.fnal.gov/event/15469/>

### Incidents:

- A PPD employee received a minor cut on his finger while attempting to repair a coffee maker. First aid only.
- A SCD employee reported two separate injuries sustained on consecutive days. The employee was cleaning a de-soldering iron and suffered burns to his right middle finger and then his left index finger and thumb. First aid given.

### Accelerator Operations / Shutdown Report:

- Shutdown work advanced.
- Distribution of cumulative effective doses based on pocket dosimeter reports looks OK.
- Shutdown duration drivers: Recycler abort Lambersons and Muon Campus work.
- This week: Safety system testing, complete/verify enclosure cleaning, Re-core MI/NuMI to operational key cores, Get major LCW systems on to operational levels.
- Next week: Complete remaining enclosure cleaning & system testing. Out of all enclosures by 16:00 on Friday Oct 20.

### MicroBooNE:

- Moved to steady off-beam data taking.
- Have studied effect of having lost a PMT. Impact modest. Do not plan to modify trigger.
- Late light studies not complete yet. Plan to take 24 hrs of late light data with HV down.
- 0.3V p.d. found between cryostat and flange ... shorted with copper tape.
- DAQ tests for SN stream continuing.
- Ready for beam.

### MINERvA:

- Nearline is working.
- Replaced 12 FEBS and 2 PMTs.
- Working on getting a spare DAQ computer operational.
- Various MINOS work: Replacing water for LCK skid, checking fans in DAQ computers, replacing rack filters. Some MINDER boards need to be replaced.
- The MINOS energy stability plot is now available and shows the impact of the tilted horn (June 29-30 and July 1-24).

**NOvA:**

- In "button up" mode.
- Begun final phase of replacing buffer nodes in FD computing farm.
- All critical systems in place for return of beam.
- Running with 2 new triggers (Michele electron and SN).
- Over last 5 weeks, FD uptime 94% (excluding planned downtimes.)

**Muon g-2:**

- PWCs reinstalled and aligned.
- Cryo running smoothly.
- Storage ring vac. now < 5E-7 torr everywhere.
- All 4 inflector modules see spikes. Could run this way but hope to fix problem.
- Quads conditioned to 24kV.
- Kickers: Flourinert issues resolved.
- Trackers: vac. testing in Lab 3.
- Calorimeter refurbished.
- This week is final conditioning week for Quads and Kickers.
- Plan to resume magnet ops on Oct 23.

**PPD:**

- Mu2e: General Atomics Model Coil schedule delays continue. Several scientists will be visiting this week to supervise next steps. ASG (Genoa) is making progress on the first TS module article. TS shell has been machined and is within tolerances. Mu2e Solenoid team (Vito Lombardo, Daniel Evboda) and Horst Friedrichs (Metrology) will go to ASG to witness coil insertion. HAB: TS prototype coil is now cold. Power up scheduled for early this week. Tracker: Straw manufacturer is winding straws. Tracker Team (Bob Wagner and Dan Ambrose (UMN postdoc)) are at winding vendor to QC a percentage of straws as they are being manufactured. Protection Collimator Review Completed (Oct 7). Reviewers have given good feedback. Various Upcoming Reviews this week. Mu2e ESH&Q team are making site visits to Mu2e institutions that are fabricating components for the experiment. They visited NIU 2 weeks ago. This week (Oct 9-10), they travel to Minnesota to the Tracker Panel fabrication facility. They visit UVA Nov 5-6 and ANL Nov 14.
- LZ: Collaboration Meeting held at Fermilab last weekend (Oct 6-8) with a backgrounds review over the two days before. Heading to a Director's Review in November and a DOE annual review in January. Underground installation/construction is going to start early next calendar year. The LZ LXe Tower is out for bids now, closing at the end of this week. The Siemens PLC is now on site. Those are the two biggest hardware items that Fermilab is responsible for.

- DES: Chicagoland DES meeting was held last week at NCSA. Several FNAL scientists attended, and several gave presentations. Year 5 data collection continues, with weather typical for this time of year.
- CMS: LHC is running better. Running in the new bunch configuration, 8b4e, they have reached the same peak luminosities as before. Highest is close to  $1.7E34$ . Doing this with a lower number of bunches means higher PU, so the LHC has started leveling around  $1.5E34$ . This keeps the PU at a reasonable level (a bit under 60) and also stays at a value where the trigger rate is not taking off. Data-taking going very well. CMS efficiency for the prior two weeks was just under 95%. Over 30 fb-1 recorded so far this year. All computing resources being fully used for 2017 MC campaign and upgrade studies.

**ND:**

- ProtoDUNE cold box cryo commissioning ongoing.
- LBNF beam optimization review last week went well.
- SBND: Continued work on TPC assembly plan.
- LBNC meeting at SURF, 26-28 October.

**LBNF:**

- No report.

**TD:**

- No report.

**Computing Operations:**

- CCD: 10/3 Sharepoint outage – performance issues resulting from recent change required reboot of one server. Also intermittent access to ESH&Q web page resulting from misconfiguration.
- SCD: CMS Operations – good week. FIFE operations - Efficiency data not being reported since downtime 9/19. Fixed at HTCondor level. Awaiting validation. Also Low level problem of losing mount points. Under investigation.

**Office of Communication:**

- No report.

**Directorate:**

- Director in India.
- Directors CD-1 review for PIP-2 this week.
- FRA Board meeting next week.

**AOB:**

- None