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PPD Status

Jonathan Lewis

AEM

9 April 2018

- HL-LHC

- Director’s Review for CD-1 last week.

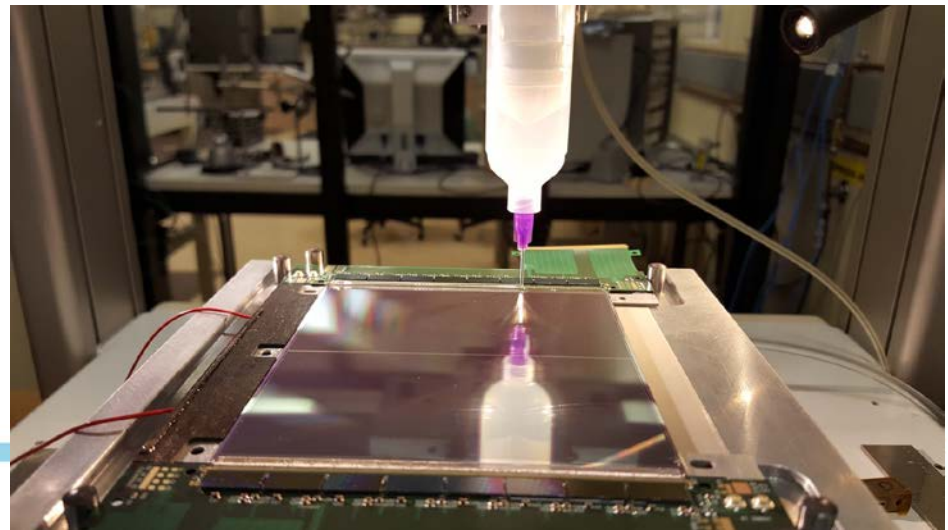
- Outcome generally favorable

- Work remains in defining contributions to the MIP Timing Detector.
We will be working on this before the CD-1 IPR review in June.

- Waiting for the “final” DOE profile we should speak to at CD-1.

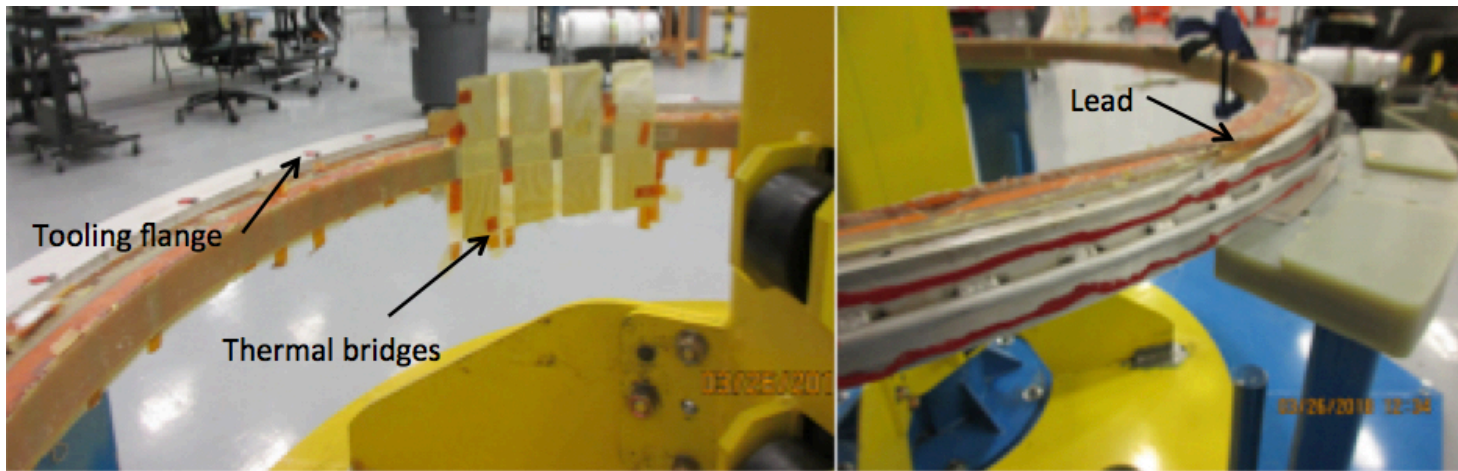
- Outer Tracker

- Programmed encapsulation gantry and performed procedure on micro bonds of the 1st Electrically functional TOB 2S Module.

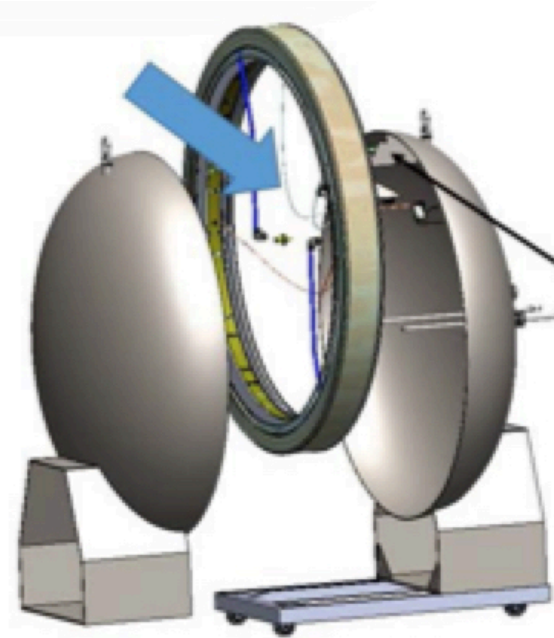


Mu2e

- Solenoids
 - PS/DS (General Atomics - Tupelo)
 - General Atomics presented an updated schedule for completing the work on the PS/DS model coil cold test, the DS1 winding and the faux-DS8 long insertion test
 - Completed by late May, at which point GA will schedule a DS Production Readiness Review to start the construction of the 11 DS coils.



Mu2e



From last week: GA cryostat for testing the model coil. The coil will be mounted horizontally in the cryostat and cooled to liquid nitrogen temperatures to test for mechanical stresses. The coil will then be shipped to Fermilab for destructive test to look for voids in the VPI and stress fractures from the cold test.

- Solenoids

- TS

- Mu2e magnet team/TD experts measured the magnetic axes of the two coils of the first TS production unit from ASG (Genoa). The angle between the two magnetic fields is well within spec. The next step will be pressure testing of the cooling lines. The unit will then be moved across to HAB for cold testing.
 - The ASG shell machining subcontractor is doing rough machining of the remaining coil shells. Final shell drawings have been sent to ASG so that the subcontractor can start on the precision machining soon.
 - Second test cryostat dish-head is being cooled down Mon/Tues of this week to test the power leads. Once the 2nd dish-head passes tests, the HAB facility will be fully commissioned for TS module testing.

Mu2e

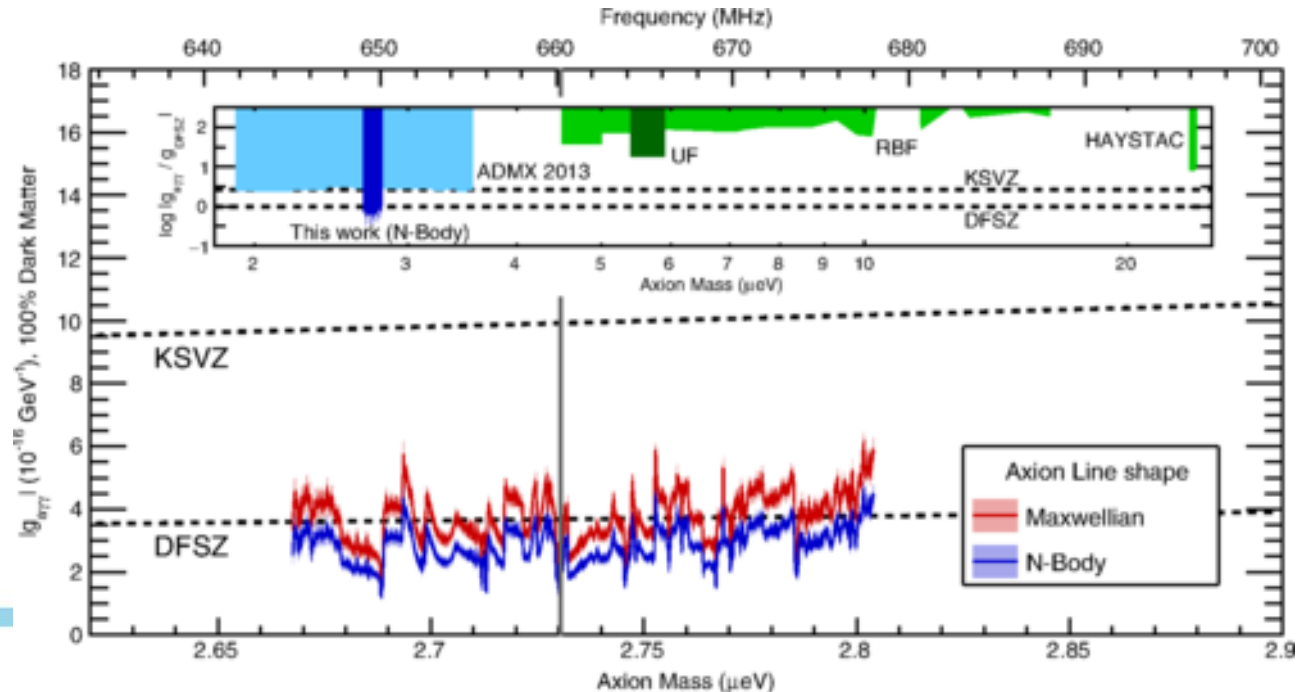
- CRV
 - Extrusion facility is back in production after a long-ish shutdown waiting for titanium dioxide for the extrusion outer coating. Barring any problems, Anna's group is still on schedule to complete the production extrusion by the end of this month.
 - 19,200 m total extruded
 - ~ 73% of detector scintillator total
 - The crates with the 4.7 m extrusions were moved to Wide Band for storage.
 - Beginning groundwork for decommissioning of NE9 to mine shield blocks
- Calorimeter
 - Finished measuring 1st batch of crystals from SICCAS at SiDet

Astro

- Axions

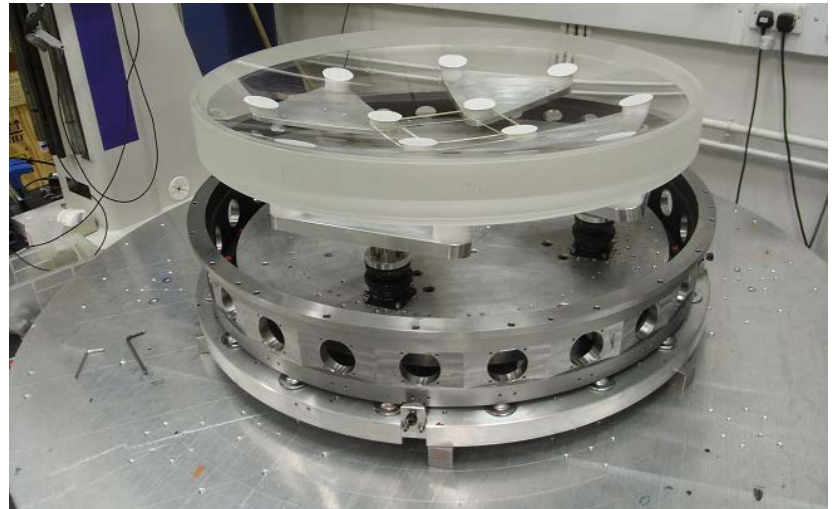
- First ADMX-G2 results were published today in PRL

- ADMX is the first experiment to reach the sensitivity level of DFSZ axion models.
- Fermilab press release and article in Symmetry today
- ADMX magnet workshop at Fermilab this friday April 13.
- ADMX continues to take data.



Astro

- LSST-DESC
 - Preparations are underway to ramp up production of Data Challenge 2.
- DESI
 - Installation of new parts (e.g. cable runs) on Mayall telescope has begun.
 - In London, work on the assembly of the optical corrector (6 elements total) continues.
 - Image shows lens ADC2, which is currently being aligned in its cell



Test Beam

- CMS Timing (T1409) continues their data taking, finishing Wednesday.
- ATLAS Pixels (T1224) will take data as they can during breaks with CMS timing. T1224 takes over and stays for the next few weeks.
- Preparing for Nova at MC7
 - Completing MC7 Firewall task. Procuring beam pipe for He gas line for secondary beam.
 - Completed fabrication of test beam collimator for NOVA

