MicroBooNE Status Report

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All Experimenters' Meeting

Aug 11, 2014

Outline

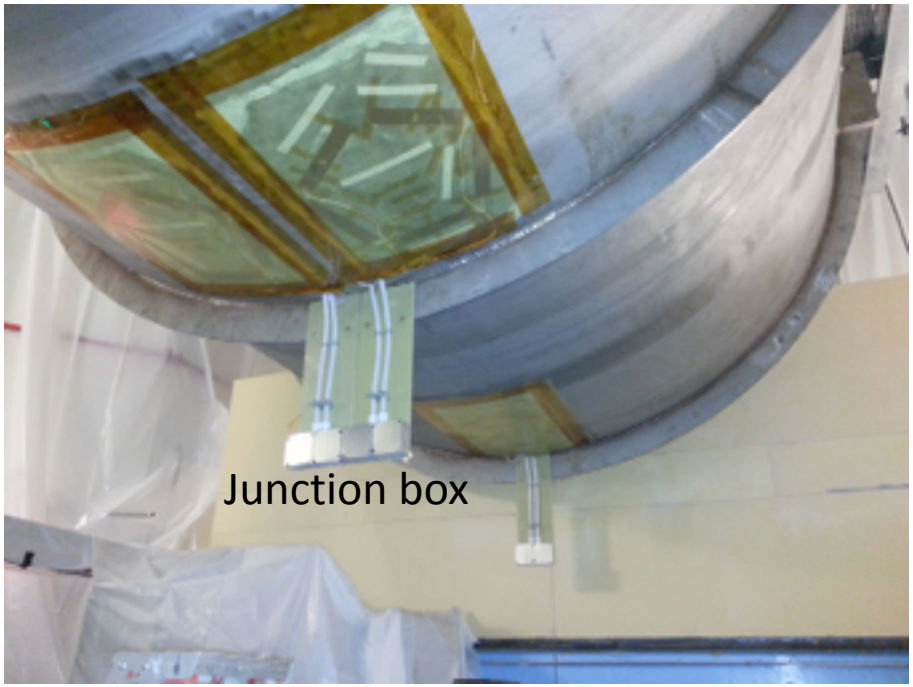
- The MicroBooNE cryostat was moved from DAB to LArTF successfully on June 23. Post-move electronics tests were done at LArTF.

- Updates since last month:
  - Foam insulation of cryostat
  - Cabling and racks
  - Analysis tools

Installation of heaters

- Heaters were attached to the bottom of cryostat on July 2.

- They are now covered by the foam and can be used for many purposes.



Platform was removed
on July 8.

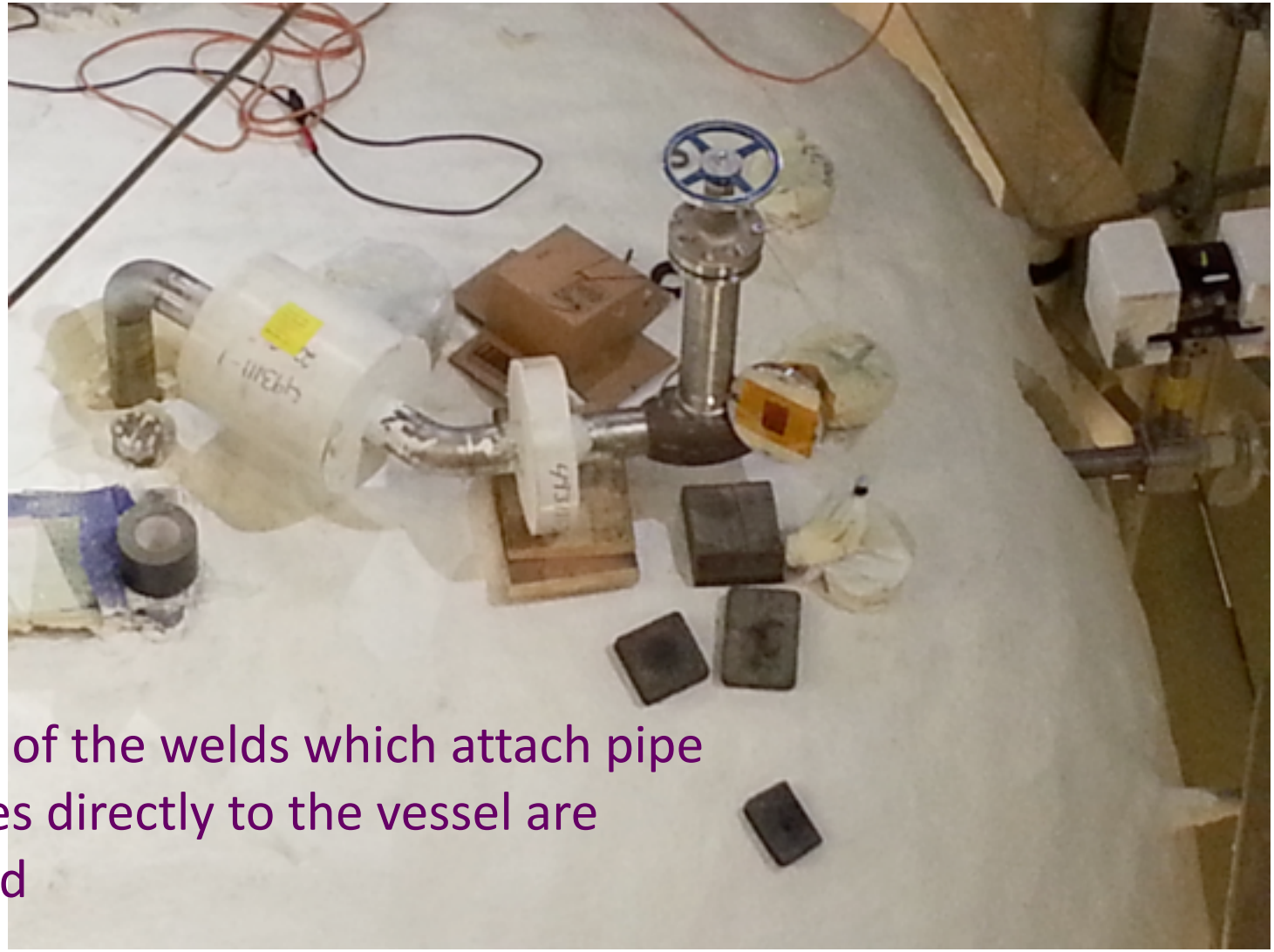
Platform is sitting on blocks in
the parking area.

Scaffolding was installed
on July 17.

Foam insulation

- 16’’ insulation foam was sprayed to cryostat (July 21-29).
- Mastic was complete on Aug. 4.

Welding



Nearly all of the welds which attach pipe assemblies directly to the vessel are completed

Cabling and Racks

- Cables are being made at DAB.
  - Lots of help from summer students.
- Racks are also being prepared at DAB.

Analysis Tools

MicroBooNE Analysis Tools sub-groups in place and developing tools since May, 2013

- Regular MC challenges
- Progress on Reconstruction/ simulation/software tools
- Thinking about first plots and first analyses

MicroBooNE Monte Carlo Challenges

- We have been generating large samples of Monte Carlo files since fall 2012 – Monte Carlo Challenge (MCC).
- It is a great way to test simulation, reconstruction and grid tools.
- We will start MCC 5.0 this month.
  - We have a fully automated reconstruction chain that includes signal shaping, hit reco, cluster reco, track reco, shower reco, calorimetry and particle ID.
  - Focus on track reconstruction and cosmic background removal.

Looking Forward

- Installation at LArTF (in progress)
  - Cryo system installation
  - Platform, rack, and cable installation

- Cool down and filling (Fall 2014)
  - Detector turning-on and commissioning immediately follows