MicroBooNE Detector Assembly and Experiment Update

All Experimenters Meeting

April 1\textsuperscript{st}, 2013

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On behalf of the MicroBooNE Collaboration
MicroBooNE (E-974)

- Liquid Argon Time Projection Chamber (LAr TPC)
  - 170 tons LAr (~84t active)
  - Located in Booster Neutrino Beamline (BNB)
Last Report (Fall '12)

Assembly Activity at DØ Assembly Building

Attaching the adjusting assemblies for the wire tensioning

Completed Anode Frame

* Slide: Jonathan Asaadi, AEM 9/10/12
Where We Are Now

- **TPC Structure Complete**
  - Many hours of work from undergraduates, grad-students, post-docs, scientists, and technicians.
  - SPECIAL THANKS: Jen Raaf & John Voirin

- All signal wires (8000+) are at FNAL
- Ready to be installed & tensioned 😊
CRYOSTAT

- Arrived at FNAL
  March 8th
- Level one milestone ⭐
- Thanks to Sue Duffin (BNL)

BEST BIRTHDAY GIFT EVER!!!
Tech Team

• With out our stellar technicians none of this would be possible. THANK YOU ALL! ★★★

Bryan Johnson, Tom Olszanowski, Mark Shoun, John Voirin, John Cornele

* Not Pictured: Tim Griffin, Andrew Lathrop, Koroush Taheri
Leak Check & Cryostat Cleaning

Thanks to DØ Crew
Pete Simon et al.

H₂O Power Washing

Wash 1: Rinse
Wash 2: Simple Green
Wash 3: Rinse
Wash 4: Simple Green
Wash 5: Rinse

Roberto Acciarri

Leak Check

All Clean!
PMT System

PMT mount with acrylic plate for wavelength shifter

PMT mounts look great!

*Special Thanks to Eric James

Stainless Steel Rack

Support Rails in Cryostat

PMT racks will be at FNAL within the week!
Test Fit of TPC & PMT

TPC Test Fit Tomorrow

PMT Test Fit April 8th

TPC Rails

TPC cart: Load ~12,000 lbs

Thompson Linear Bearing
Almost There
Beneficial Occupancy by mid-April

Removable Roof

Electrical conduit installed

LArTF

Dixon Bogert

MicroBooNE Detector

Reserved Parking
FOR
MicroBooNE Detector
ALL OTHERS WILL BE TOWED
Upcoming Work

- Lots of activity thus far and more to go
  - MicroBooNE is committed to safety
    **No injuries!**

- Many thanks to all the undergraduates, grad-students, post-docs, scientists, and technicians who have contributed!

- Keep an eye out for exciting update from MicroBooNE in the weeks to come.
  --Please come visit