



ArgonCube 2x2 Demonstrator

Geoff Savage

18 April 2024

2x2 DAQ/Computing Working Group



News

- Underground access still on hold
 - 3rd party elevator inspection today?
 - Person basket permissions in progress
- 2x2 analysis workshop Wed-Fri next week (24-26 April)
- Planning for a 6-hour run on April 23 (9am-3pm CT)
- 2x2 Shifting Meeting – 11 am Friday 19 April via zoom
 - Bruno, Faiza, Nimmy, Geoff
 - Review documentation from Bruno
- Wednesday 5 pm meeting at User's Center
 - Well attended yesterday
 - Why does grafana use all the CPU resources when displaying charge DQM data?
 - How do we get data into prometheus database to simplify connection to external facing grafana instance?
 - Creating a runs database? Sindhu
 - Do we need an event database?

Personnel

- Bruno to Brazil on Thursday 25 April
 - Dinner at Two Brothers Tap house on Tuesday 23 April at 6:30 pm
- Short term
 - Marjolein van Nuland: Student from Nikhef. Arrived at FNAL today, onsite until April 27.
 - Stephen G: Will be at FNAL next week
 - Jaafar C: Will be at FNAL next week
 - Sindhu K: At FNAL now and will stay through next week
 - Kevin: Week-to-week. Will be at FNAL April 22-25.
 - Livio: Will be at FNAL next week
- Long term
 - DeMario: at FNAL now and has plans for long term stay (looking for long term housing)
 - Faiza
- Jessie?
- Akeem?

Beam Signals

- A9 (Beam Gate) - complete
 - Present in light readout
 - Uses copper to fiber TTL converters borrowed from Icarus
 - Used by Minerva – copper cable
 - Still need to power cycle Minerva readout server to resume testing
- Resistive Wall Monitor (RWM)
 - Fiber to TTL Receiver installed in Light ADC rack
 - Input = Multi-mode fiber ST/ST
 - Output = Six lemo copper
 - Trunk fiber from surface to underground terminated in fiber distribution boxes
 - Ends on original trunk were too brittle to make new connections
 - AD expert verified RWM signals arrive in Minos Surface Building
- All parts are at Fermilab
 - Fibers for RWM – multimode with ST connectors
 - Copper to fiber converters for RWM signal to Minerva