

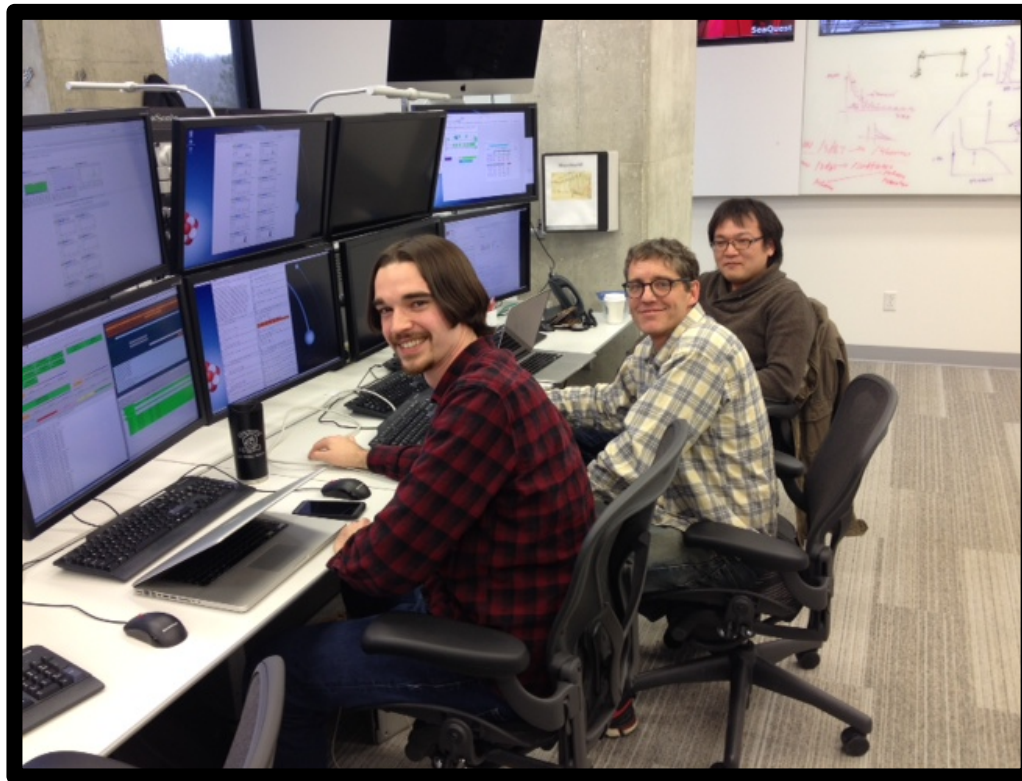
# MICROBOONE STATUS REPORT

WESLEY KETCHUM (LANL)

# OCCUPYING THE CONTROL ROOM!

**You may notice some new people in ROC West...**

- Using control room as base for many Readout/DAQ pre-commissioning tasks



# READOUT

## Final pre-commissioning tasks

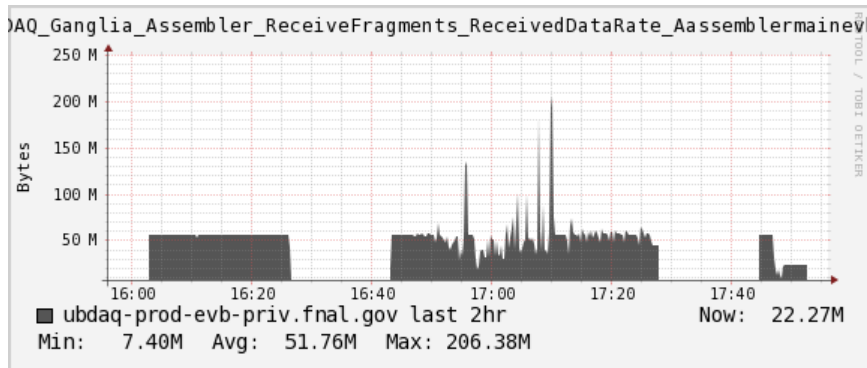
- Testing and debugging of TPC readout and trigger FPGA firmware
  - Validating lossless Huffman compression and lossy “SN” compression streams
- Verified final configuration procedure and monitoring of readout electronics’ status
- Fully connected readout, ASIC configuration, and ASIC calibration cables

# DATA ACQUISITION

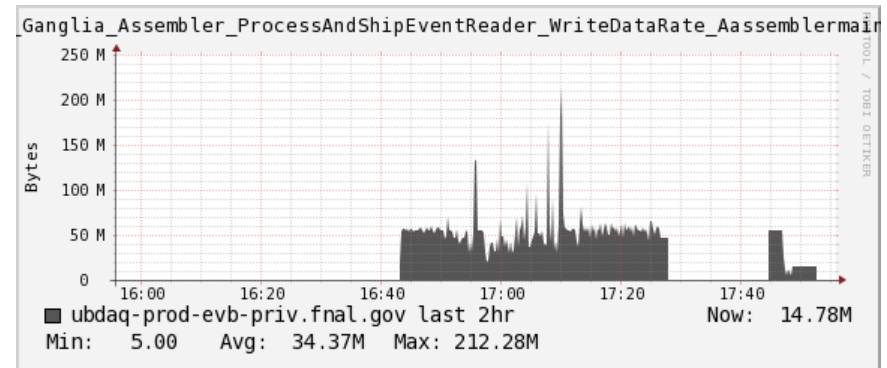
## Running full system tests with DAQ

- 9 TPC readout crates + PMT/TRIG crate
  - Also have incorporated laser sub-system
- External trigger mode (pulser) at  $\sim$ Hz
- Investigating and modifying custom metrics for monitoring and debugging

### Incoming data rate on Event Builder



### Disk writing rate on Event Builder



# SCREENSHOT!

The screenshot displays a Linux desktop environment with three main application windows:

- DAQApplicationManager**: Shows sub-event builders (sebAppseb01 to sebAppseb10), managers (reServer, rmServer), and an assembler (assemblerMainevb). It includes control buttons for starting, stopping, and restarting groups and systems.
- LArTF Detector Run Control**: Displays resource allocation, configuration options, and real-time status for Run: 0 and Subrun: -1. It shows 0 events and a run type of 'Test'. A log window at the bottom shows status responses from various components.
- LArTF Detector Resource Manager**: A table listing resources and their states.

ID	Host	App State	RC State	Port
Managers				
Resource Manager Server	ubdaq-prod-evb	Enabled	ResourceRes...	
Run Control Server	ubdaq-prod-evb	Enabled	ResourceRes...	
Assembler Lists				
Assembler Mainevb	ubdaq-prod-evb	Enabled	ResourceRes...	0
SEB Lists				
SEB Applications				
sebAppseb01	ubdaq-prod-seb01	Enabled	ResourceRes...	
sebAppseb02	ubdaq-prod-seb02	Enabled	ResourceRes...	
sebAppseb03	ubdaq-prod-seb03	Enabled	ResourceRes...	
sebAppseb04	ubdaq-prod-seb04	Enabled	ResourceRes...	
sebAppseb05	ubdaq-prod-seb05	Enabled	ResourceRes...	
sebAppseb06	ubdaq-prod-seb06	Enabled	ResourceRes...	
sebAppseb07	ubdaq-prod-seb07	Enabled	ResourceRes...	
sebAppseb08	ubdaq-prod-seb08	Enabled	ResourceRes...	
sebAppseb09	ubdaq-prod-seb09	Enabled	ResourceRes...	
sebAppseb10	ubdaq-prod-seb10	Enabled	ResourceRes...	

The terminal window shows a continuous stream of status responses from the various components, all in a '(Main::Idle)' state.

# CRYOGENICS

- ODH 1 status below grade
  - Restricted access procedures in place
- Leak checks ongoing
- Laser flange testing complete
- Contract for liquid argon imminent
- Paying close attention to cryogenics control systems in preparation for the fill

# ONGOING AND UPCOMING TASKS

- Hardware interlocks
- Wire bias HV checkout
- Muon tracker installation
- Operating slow control monitoring
- PMT LED-calibration system testing
- Offline Software Review (Feb 23-24)