DUNE DAQ Consortium CB Meeting Minutes

Prepared: J. Hays, October 30th 2023

Meeting took place October 30th 2023, 08:00-09:00 CET on Zoom

Indico: <https://indico.fnal.gov/event/61899/>

Attendance:

Jonathan Hays (JH), QMUL

Asher Kaboth, RHUL

Morgan Wascko, Oxford

Nikolina Ilic, Toronto

Georgine Karagiorgi, Columbia

Josh Klein, Pennsylvania

Marco Roda, Liverpool

Ryan Nichol, UCL

Brett Viren, BNL

Alan Watson, Birmingham

Giovanna Lehmann (GL), CERN

Alec Habig, Minnesota Duluth (proxy via BNL)

Apologies:

Adi Ashkenazi, Tel Aviv

Jim Brooke, Bristol

Andrzej Szelc, Edinburgh

Simon Peeters, Sussex

Claire Sheperd-Thermistocleous, RAL

Patrick Dunne, Imperial

## Opening of the meeting (GL)

* 1. JH agreed to prepare the minutes.
  2. With 12 institutes represented at the beginning, meeting declared quorate.

## DAQ CB Mandate and Election of DB Chair (GL)

* 1. Discussion of the election of the CB Chair. At the time of the meeting 15 out of 19 institutes had submitted their vote. Poll will remain open until end of the day at 24:00 CET October 30th, 2023, or until all 19 votes have been submitted. (Note added after the meeting – election concluded with the election of Ryan Nichols as new CB chair).
  2. Questions or comments invited on the CB Constitution. It was noted that it is not anticipated that there be any formal regular review of the constitution and that the document is expected to cover both construction and operation periods of the experiment. It would only be changed if required. It was also noted that the Org Chart as presented in the document is not a formal part of the constitution but shows the status at the time of writing.
  3. With no objections raised the CB Constitution is APPROVED as presented.

## Institutional Responsibilities and upcoming milestones (GL)

* 1. Presentation from GL – DAQ Consortium Responsibilities and Milestones. Slides can be reviewed on the indico agenda linked above.
  2. Testing of infrastructure and systems was discussed. It was noted that:
     + full testing of the trigger – beyond what can already be done now - cannot be carried out prior to filling with LAr as ultimately the real backgrounds need to be understood. However, the scalability of the system can be tested in advance of this.
     + scalability testing needs about 1 year prior to the commissioning of physics triggering to be complete.
     + there is no expectation of full low-energy triggering (including SN triggering) at turn-on – as this will take longer to commission. However, cosmic triggering should be available within a space of a few weeks during commissioning.
     + during commissioning testing should largely be limited to scaling to the specific backgrounds observed – all other infrastructure should be ready at that point.
  3. Issue of resources and scheduling for photon detector triggers was discussed.
     + Not formally scheduled into planning but could fit within schedule – no additional time needed. Rather limitation is on effort to write the algorithms to build PDS trigger candidates etc. Engagement from groups working on PDS to contribute to PDS trigger welcome.
  4. Diagram showing MOU FW/SW responsibilities was shown.
     + Noted that this is not representative of current status, rather the status at the time of signing of the MOUs. Additional contributions and changes noted on following slide.
  5. Key points from the summary of the presentation:
     + SW needs to mature in 2024 to the level that we are able to produce a specification for the servers
     + Noted that there are many contributors, but some are working at a low-level and this leads to inefficiency
     + Noted that there is a lack of SW engineering expertise
     + DAQ project is widely spread with few occasions to meet in person. Round-table meetings can work well in person but less effective on Zoom.
     + Workshop planned at CERN after the collaboration meeting (early 2024)
     + Invite those who can send people for longer stay at CERN to do so – build critical mass of people working locally. Also noted that UK groups could meet in person more regularly in the UK.
  6. No AOB
  7. Next meeting will be scheduled and run by the newly elected CB Chair.