

# CygnosDAQ report

Oct. 15th, 2020

# Outline

- Start testing reconstruction code on GPUs
- Revise components for the PMT DAQ board
- Start the discussion on how to be ready to trigger and readout the camera for possible LIME tests by the end of the year

All the details available on the DAQ meeting agenda [here](#)

New mailing list for the daq: [cygno-daq@list.infn.it](mailto:cygno-daq@list.infn.it)

To register:

1. Send a message to [sympa@lists.infn.it](mailto:sympa@lists.infn.it) from the address you want to subscribe to the list
2. In the subject line of your message, type in: "subscribe cygno-daq Firstname Name" (with your Firstname and Name)
3. Leave the message body blank.

# RAPIDS and Docker

- [Docker](#) is apparently the right way to setup a software container with all the necessary libraries and configurations. This container can then be imported on different machines and executed with no problems
- We installed docker on GAP01, and created a container with RAPIDS and all the libraries needed to run DBSCAN
- Amaro provided us the notebook for a preliminary test
- **Next step:**
  - have a docker container available to everyone
  - Develop the benchmark of DBSCAN on CPU and GPU

- Survey and selection of technologies/devices: ADC, FPGA,  $\mu$ C. **DONE**
- Drawing electrical schematics: analog input circuit, ADC connections, microcontroller circuit. **DONE**
- **Survey of other FPGA due to software licence issue (Quartus Prime).  
New FPGA family selected: Cyclone V. DONE**
- **Second ADC option selected due to transceiver speed limitation in Cyclone V.**
- Drawing electrical schematics: FPGA circuit. **DOING**
- Possible design change: 4 input channels instead of 8 because of routing restrictions with new ADC.