Calorimeters updates
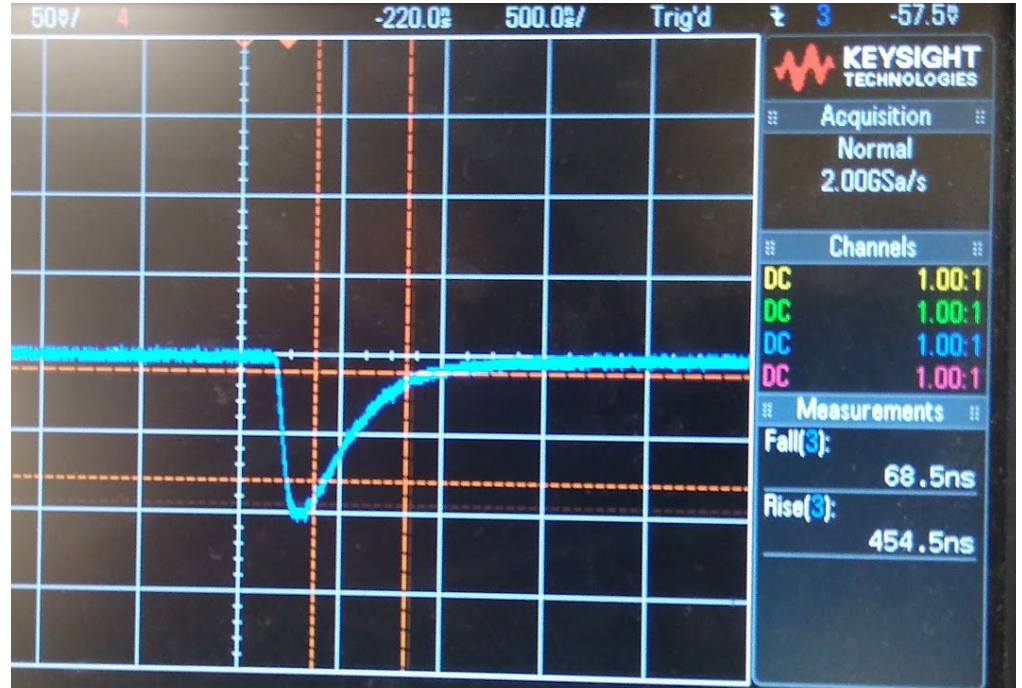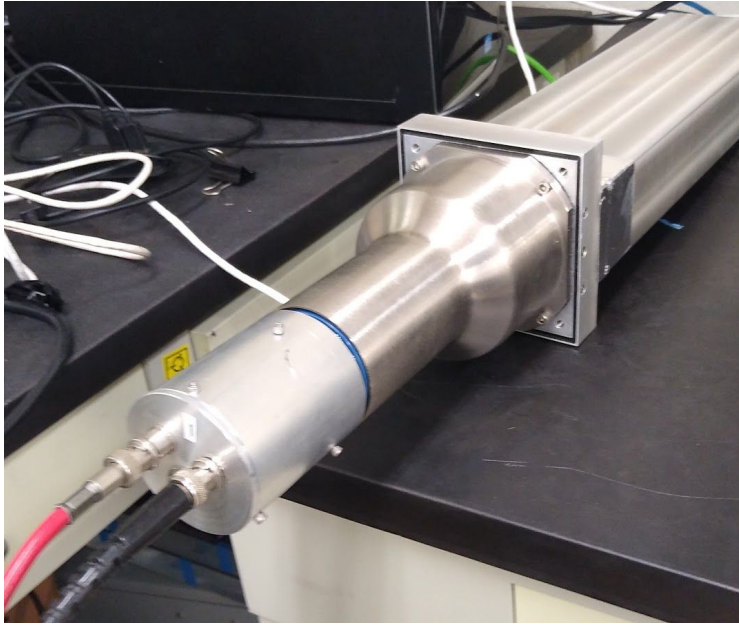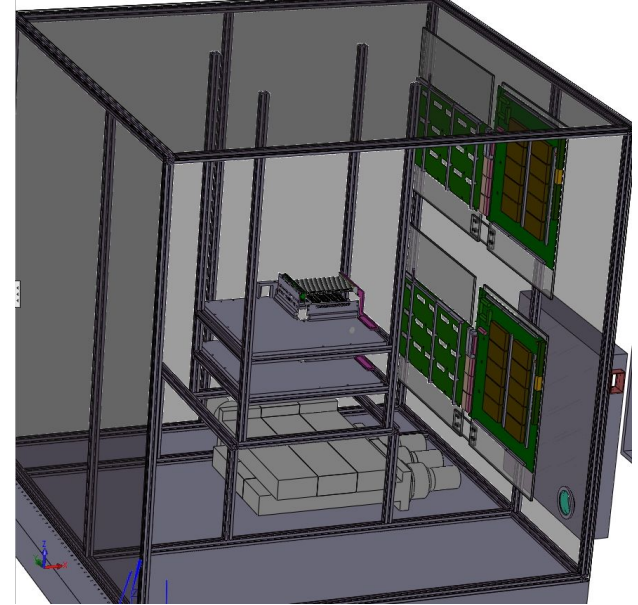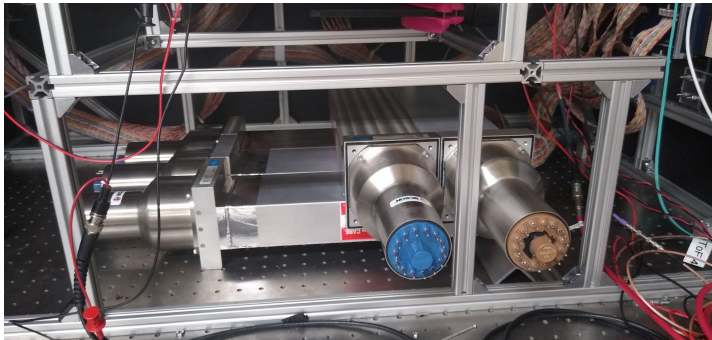
Salvador Ventura
07-JUNE-2021

Calorimeter first test using the scope

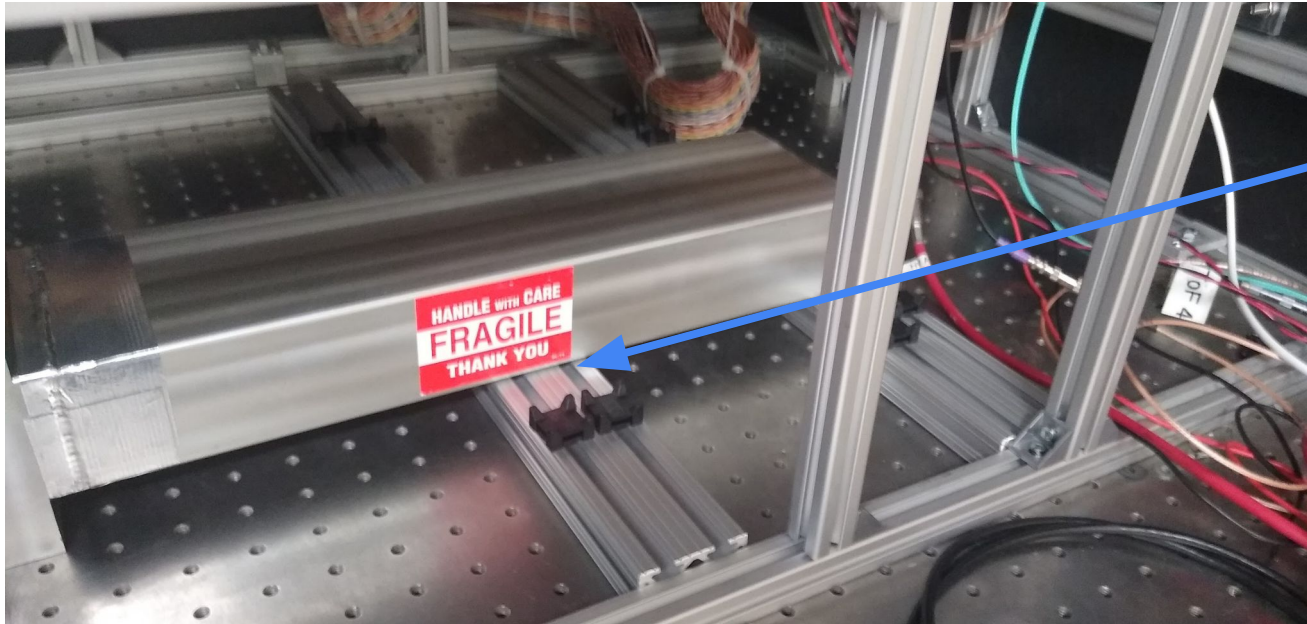- **HV = 1000 V**

Calorimeters placement in the box

Alignment x-Axis calorimeters

Wedge needed here

General plan

FW/SW for HMB

Main goal: get calorimeter data.

1. Digitization of a fixed number of windows upon trigger.
2. Account for trigger delay.
3. Define data format to deliver.
4. Documenting FW/SW

Mechanical work

- Document the 3D models, upload files to the github repo.
- Add new models for 6UVME TARGETC readout boards and more components in case they are needed.

Current status

FW/SW for HMB using 16-PMT-channel board

- Getting pulses in user mode, just reading x number of windows at time. Waveform generator pulses.
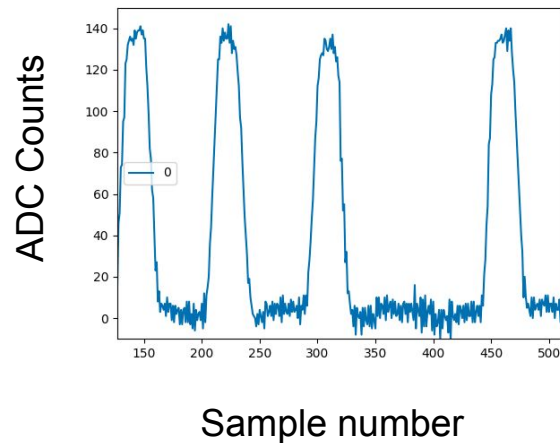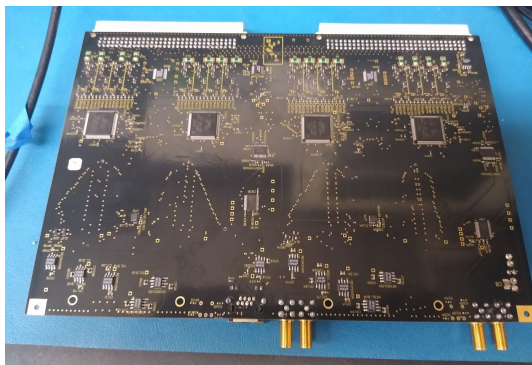
- Currently testing a circular buffer that will store a fixed number of windows upon an asynchronous trigger. The module was previously tested in simulations.

Current status

Mechanical work

- 3D models:
    - Box structure
    - Scintillator planes, boards and supports
    - NaI(TI) scintillators
    - Sci-fi board and supports
    - KLM / RHIC boards and supports
    - Feedthrough box.

- Fabrication
    - Feedthrough box
    - Acrylic bases for KLM/RHIC and Sci-fi boards
    - Support for scintillator planes