VD Coldbox Membrane Modules Readout with DAPHNE Update

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DAPHNE Installation at Coldbox

- DAPHNEv2 I brought from CSU is now installed down by the coldbox at CERN np02
- Only can readout membrane modules at the moment since this DAPHNE is not setup to readout cathode modules (Milano DAPHNE is coming Monday next week for this)
- At the moment, only connected HD membrane









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DAPHNE Installation at Coldbox

- DAPHNE is connected to DAQ with data fibers, RG45 for slow controls, and a timing interface fiber
- At the moment all four data fibers connected, but:
 - We only plan to readout the two membrane channels in this DAPHNE, so only need one fiber for this **DAPHNE**
 - Then two (or three) of the remaining fibers would go to the other DAPHNE for reading the 8 cathode module channels





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Reading from DAPHNE

- Can access DAPHNE spy buffers over the network (endpoint 110)
- Currently in the process of finishing setting up timing interface and testing DAQ connection
- DAPHNE is setup to stream all channels from AFE3 (where the HD module is connected right now)

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### **Current Problems for Next Week**

- coldbox is located is limited and sporatic. We will probably need to do some calibration tests.
- Only have 1 timing interface fiber and RG45 to DAQ right now for this DAPHNE, need another set for the second DAPHNE

• With beam testing going on until Wednesday, access to the pit where the request access to the pit for a short time tomorrow to be able to continue work, and possibly again on Monday to install the second DAPHNE and





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### **Other Remaining Items**

- taking data with DAQ. With the HD module connected, we have
- Setup LED pulser, which is easy but need to be in the pit to tune LED but at least for the short time we will probably use the normal way whenever we manage to get access to the pit. (But this is only a to the pit.)

• Finishing setting up and testing timing interface for DAPHNE and testing something to look at in DAPHNE when the access is limited to the pit

pulse. Alternative was to setup one of the calibration modules from Zelimir (who confirmed we could use it) so that we could use the DAQ to create the LED pulses. There has not yet been a decision on how we will do this, temporary problem, as after Wednesday we will apparently have access



