

# HCal timeline (B. Quinn      May 22/19)

Modules produced, shipped, mounted in subassemblies

Pulser calibration system built, installed

PMTs tested, positioned

HCal-Front End (and  $\frac{1}{2}$  internal Front-End cabling)

Front End to fADC

fADC readout

----- Done-----

Timing vs. discriminator position

PMT timing JLab vs. CMU (corrections needed?)

Study PMT rotation effect on cosmics / pulser

Two VME crates, all fADCs, F1 TDCs

F1 TDC readout

Front-End to DAQ cabling

-----June/19-----

Install PMTs (cleaned, with grease, tape, O-rings)

(replace mylar as needed)

Test full signal path (1/2 HCal)

Cross-talk tests

Calibrate pulser p.e.'s for each tube

-----July/19-----

Cosmic tests

Cable all of HCal Front End ??? (Students available to help)

HV curves, gain equalization

Timing resolution tests with TDC/fADC (cosmic and pulser)

-----Aug/19-----

Basic GMn DAQ / analysis

-----Sept/19-----

Build pulser control into GMn DAQ

-----Oct 19-----

High statistics cosmic tests

Gain stability

----- Dec/19-----

Dry air manifold/tubing... flow rate tests ???

HCal trigger using JLab summing modules ?????