# Experimental setup in MT6.2C: commissioning



### Use photons produced in the LAPPD window



- 20 μm MCP pore LAPPD tile 126
- 8x8 pixel field (6mm square pads) on L01e board
- Tracker and V1742 digitizers are shown to work in sync



# **Picture gallery**









# Experimental setup in MT6.2C as of last night



## Aspheric lens in "unfavorable" configuration

- Continue with tile 126 till Wednesday
- Identify single photon clusters produced by the aspheric lens
- 10 μm LAPPD tile 136 (full glass body) sent out by Incom yesterday ...
- ... and Mark is coming back to Fermilab tomorrow





# Measurement program: first week in retrospect

### Starting Monday June 13th

## Installation and 120 GeV running with the (L02b) / L03c board and aspheric lens

Activity / milestone	
Trainings, badging, etc.	Monday - Tuesday
Operation readiness review	Tuesday late afternoon
DAQ & computing ready to go	by Wednesday evening
Tracker: beam profiles, etc.	Wednesday - Thursday
Planacon timing: t <sub>2</sub> -t <sub>1</sub> event display	by Thursday evening
LAPPD installation	Wednesday - Thursday
The rest of the online / offline software	in a "useable state" by Friday
Beam line Cherenkov counters + DAQ	Some time during this first week
Aerogel "test station" setup & measurements	As long as it takes

# LAPPD basic performance evaluation (Cherenkov imaging spatial resolution and timing resolution) in a 2021 setup: Friday - Sunday

# Measurement program: second week as seen on Jun 6th

### Starting Monday June 20th

### \_ow energy running with the (L02b) / L03c / L05a boards and aerogel radiator

#### **Activity / milestone**

Establish aerogel Cherenkov photon yield

Establish time-of-flight measurement

mRICH configuration with a 7" FL Fresnel lens

pfRICH configuration (requires a switch to the L05a board)

## "Nominal" $\pi/K$ separation evaluation in the 5..10 GeV/c momentum range

- Optionally:
  - $e/\pi$  separation in the 2..3 GeV/c momentum range
  - mRICH XY-scan and angular scan
  - Try various types of aerogel
  - LAPPD "HV scan"

- Compare two different LAPPDs
- Try 2.5mm pad pattern of the L03c board
- ..?

## We can make use of the night shifts if we manage to staff them