

Overview of the Temple University MPGD Lab Facility

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1ST INTERNATIONAL WORKSHOP ON A 2ND DETECTOR FOR THE ELECTRON-ION COLLIDER

Temple University, Philadelphia, PA May 17-19, 2023

1ST INTERNATIONAL WORKSHOP ON A 2ND DETECTOR FOR THE EIC

Detector Lab (1)

Assembled detector testing

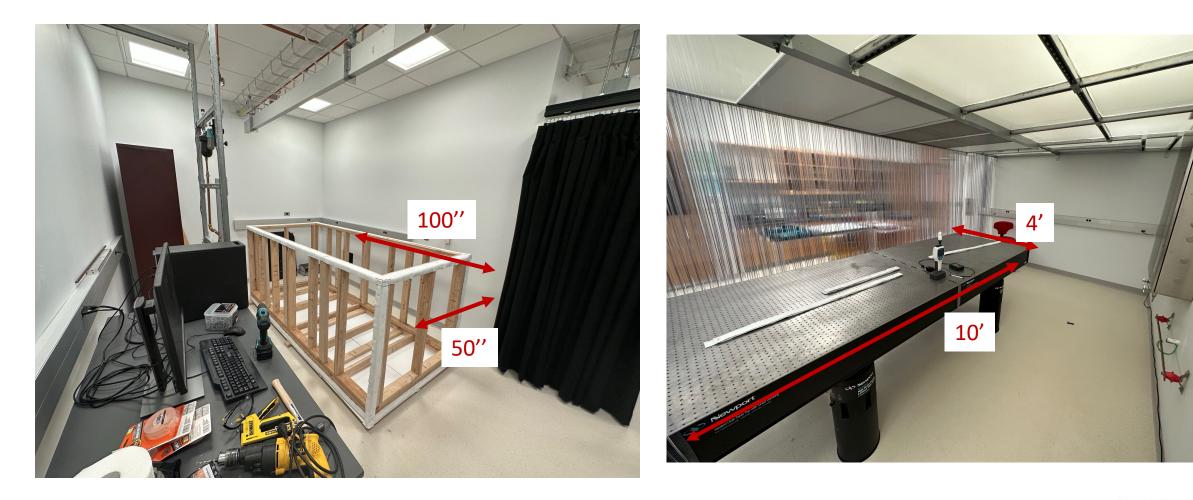
- Portable class 1000 cleanroom (800 sq. ft)
- Cosmic ray test bench
- 4'x6' optical table (in cleanroom)
- Detector gas flow system
- SRS DAQ system (w/FECv6 + ADC + rcdaq)
- CAEN HV system
- Ultra sonic bath (27.5 in x 26 in x 20 in)
- DI water supply





Detector Lab (2)

- High-rate x-ray test station
- Class 1000 portable clean room with optical table





Detector Lab (3)

- Lab space (540 sq. ft)
- Table (5' x 11')
- Oven (30 in x 30 in x 35 in)







Detector Assembly Lab

Permanent class 1000 cleanroom (1,800 sq. ft.)

- Two Gas distribution panels
- \circ Leakage current boxes
- Two humidity controlled N2 dry boxes
 (48 in x 35 in x 24 in)
- Humidity controlled dry box (no gas)
- o 60 in x 100 in optical scanning system
- HV distribution box







Detector Assembly Lab

Permanent class 1000 cleanroom (1,800 sq. ft.)

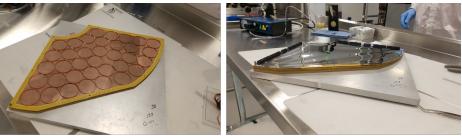
• MPGD cleaning, stretching, gluing and testing stations

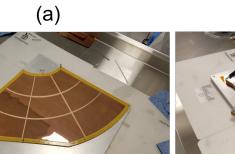




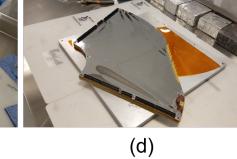


MPGD Facility

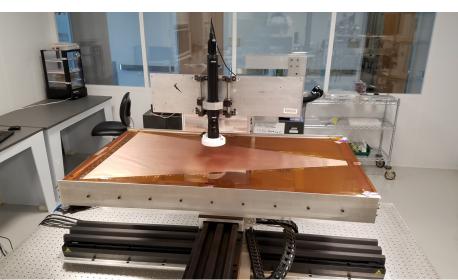




(c)

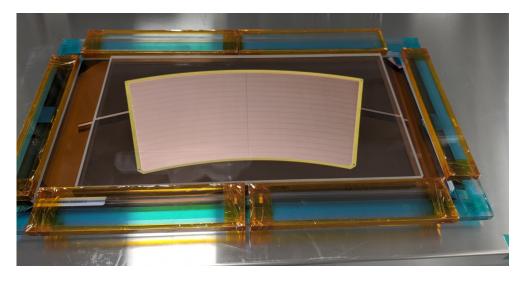


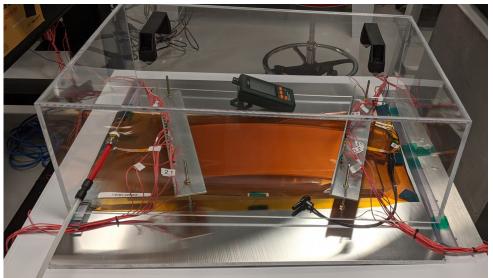
(b)













2nd Detector for EIC Workshop, May 18th 2023