

MPGD-DSC - μ RWELL-BOT bi-weekly

Update on PED Test Article design

Kondo Gnanvo – Sept. 18, 2025


invitation to meet the ePIC preTDR Editorial Board on October 1st



Silvia Dalla Torre <Silvia.DallaTorre@ts.infn.it>

To Ernst Sichtermann; Gnanvo, Kondo (kg6cq)

Cc John Haggerty; Rosario Turrisi; Evdokimov, Olga; Peter Jones; Yongsun Kim; Yulia Furletova; elke-caroline aschenauer; Lajoie, John; Renee Fatemi; Zhenyu Ye; thomas ullrich

 You replied to this message on 9/15/2025 6:22 PM.
We removed extra line breaks from this message.

Dear Ernst, dear Kondo,

the ePIC preTDR Editorial Board has been at work since August 6th.

The Board would like to meet you DSLs of the tracking DSCs at its meeting on October 1st at 10.30am ET.

The Board would like to provide you initial feedback about the texts related to your subsystems in the preTDR Version2.2.

Please, feel free to extend this invitation to a limited number of your collaborators, namely those that you consider more relevant for the preTDR text and its finalization.

@Ernst: in July you mentioned that you were planning further editing of the preTDR SVT text in August.

Please, let us know if we should make reference to the text as it was at the beginning of August or the present text (mid September). Thank you.

Thank you for promptly letting us know if you accept this invitation and who else will join.

Please, always answer to the whole list here in cc.

Zoom link:

<https://cern.zoom.us/j/9374314394?pwd=YTFjZjFGcXptMG13cGFQYWFGQOWdrZz09>

Best greetings,

Silvia, John H.

--

Silvia DALLA TORRE

<http://wwwusers.ts.infn.it/~dallator/SilviaDALLATORRE/>

Detector Reviews & Meetings planned for 2025/2026

Preliminary Design Reviews (60% design maturity equivalent, called PDR, PDR2 or PDR3, pending the subsystem)

- PDR: MPGD Tracking Detectors (6.10.03.02) – Summer/Fall 2025 → **checking November-January period** – Note: FDR only after completion of first engineering test articles
- PDR2: Silicon Tracking Detectors (6.10.03.01) – Fall 2025 – TBD → **Tentative January 2026**
- ✓ PDR2: Cherenkov-based Particle Identification Detectors (6.10.04; pFRICH, hpDIRC, dRICH) – April 1-2, 2025
- PDR2: AC-LGAD-based Particle Identification Detectors (6.10.04; BTOF, FTOF, common systems) – **November 2025**
- **PDR3: Barrel EM Cal (6.10.05.02) – Confirmed for September 17-18**
- PDR (60%) Barrel & Forward & Backward HCAL (6.10.05.01; 6.10.06.02; 6.10.06.03) and forward ECAL – **week of October 6**
- PDR: Magnet Cryogenics and infrastructure (6.10.07) – October 22 or 23, 2025 → **Moved to 1st week of November to integrate with overarching Cryogenics review.**
- ✓ PDR3: Electronics/DAQ-computing (6.10.08. 6.10.09.01) – September 3-4, 2025 (this did not include slow controls)
- PDR: DAQ-Slow Controls (6.10.09.02) → **early 2026** – Later to ensure integration DAQ in the collider common platform
- PDR: Integration, Infrastructure and Installation (6.10.10) – **October 30, 2025** – everything outside GST, includes cradle, HCAL, etc. → **Week of Dec. 8 or Dec. 15**
- PDR: Integration, Infrastructure and Installation (6.10.10) – **December 15, 2025** – everything inside GST → **Week of Dec. 8 or Dec. 15**
- PDR3: IR Integration and Auxiliary Detectors (6.10.11) – November/December 2025 → **March 2026** – includes 6.10.14 lumi detector
- PDR2: Polarimetry (6.10.14) – September/October 2025 → **January 2026**

Final Design Reviews (FDR):

- ✓ FDR: Final Design Review of the BABAR DIRC Bar Refurbishment for the High Performance DIRC Particle Identification Detector – April 1, 2025
- FDR: Backward EM Calorimetry → **February 2026.**

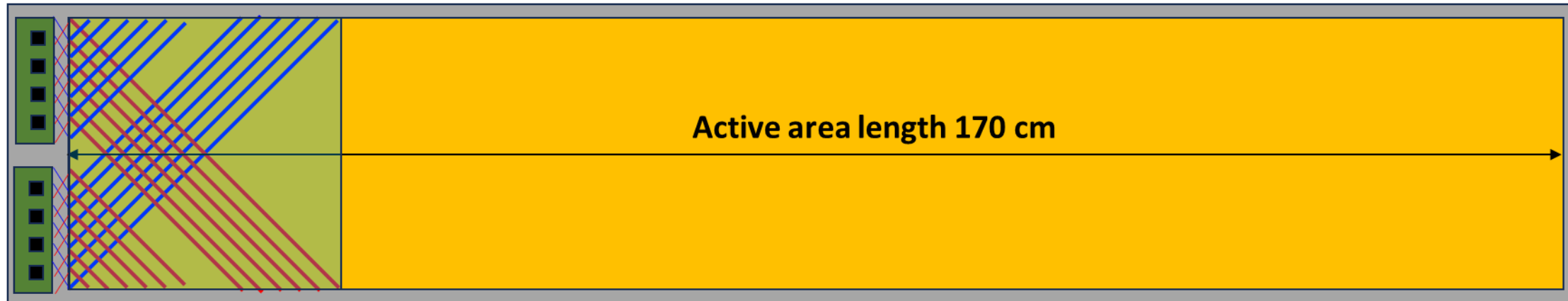
Project Reviews:

- ✓ DOE OPA CD-3B Review – January 7-9, 2025
- ✓ “Red Team” Review (acts as Director’s Review for DOE OPA Focused Status Review) – May 20-21, 2025
- ✓ DOE OPA Focused Status Review – August 5-7, 2025
- Baseline Readiness Assessment Review – **November 12-14, 2025**
- DOE OPA Independent Project Review – March 9-12, 2026

Other Meetings:

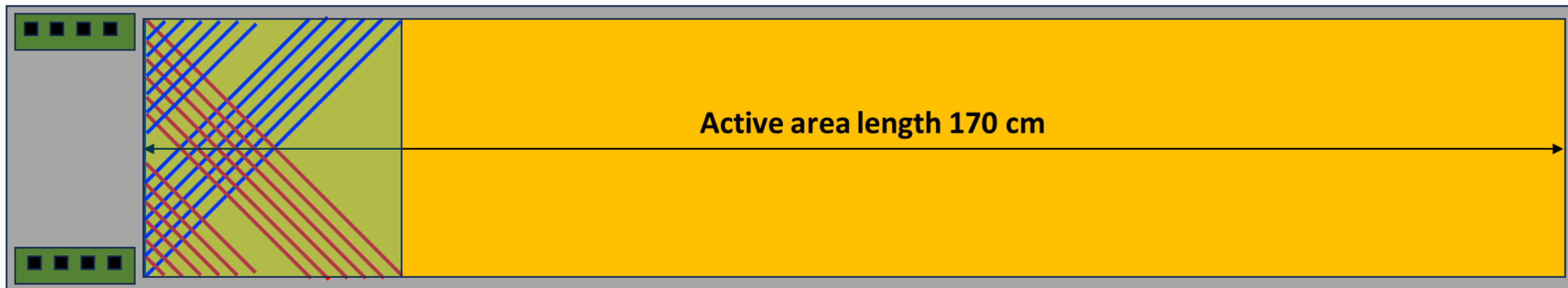
- ✓ EIC International Computing Organization (EICO) – April 2-4, 2025 @BNL
- ✓ Detector R&D Day hosted by ePIC and EIC Project – April 16-17, 2025
- ✓ Technical interchange meeting with EIC Computing and Software Advisory Committee (ECSAC) – May 12, 2025
- ✓ 5th RRB Meeting: June 5-6, 2025 – Prague, Czech
- ✓ 10th DAC Meeting – Comprehensive look to design status and readiness for CD-2. June 11-13, 2025.
- EIC Software & Computing annual review – **October 6-7 @ JLab (and Echelon 0-1 mini-workshop on October 8)**
- 6th RRB Meeting: November 4-5, 2025 - BNL

μ RWELL-BOT U/V strip layout **current** Design \rightarrow minimize the total length / active area length ratio



Total length 180 cm

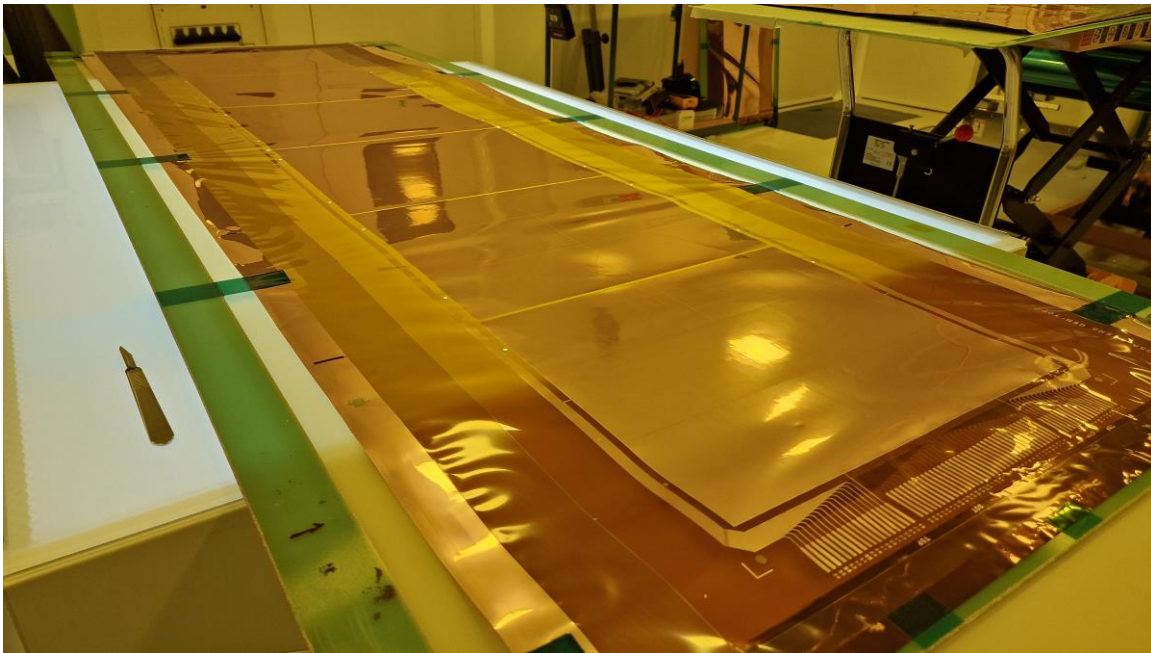
μ RWELL-BOT U/V strip layout **alternative** Design \rightarrow increase the total length / active area length ratio



Total length 190 to 195 cm

GEM foil

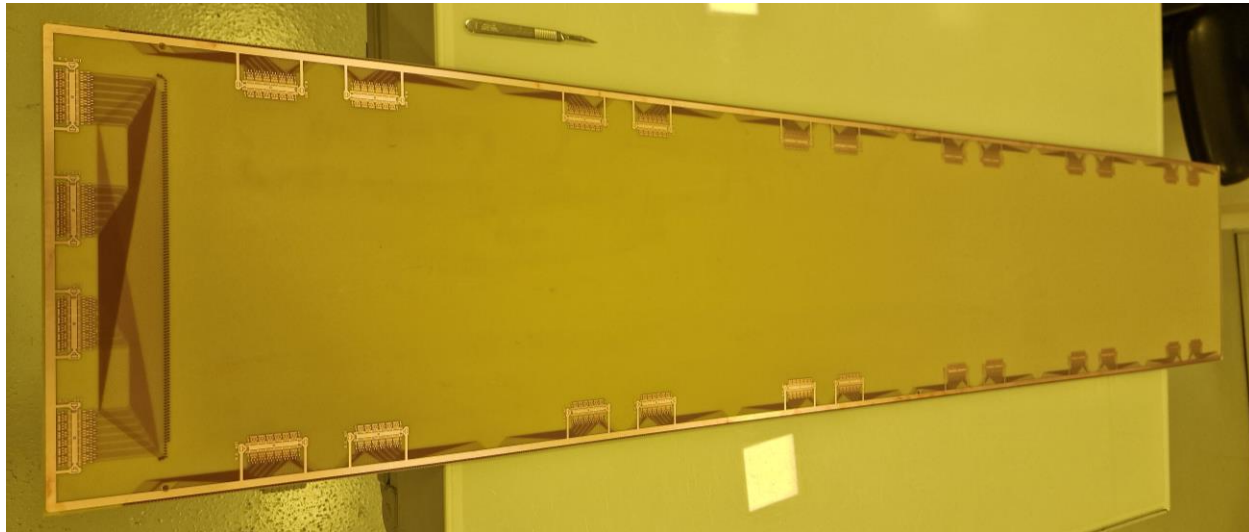
- ❖ GEM foil & μ RWELL / X-Y strip readout (in hand)
 - ❖ Delivered at JLab yesterday (September 3rd)
- ❖ Cathode foil is already competed (in hand)
- ❖ Frames from RESARM (in hand)
- ❖ 30 Hirose-to-Panasonic adapter (in hand)
 - ❖ We could then test the test article with APV25 electronics while waiting for SALSA
- ❖ We have all detector parts in hand (almost) for the assembly in Sept.



GEM foil



μ RWELL / CapaSh readout PCB: Front view



μ RWELL / CapaSh readout PCB: back view