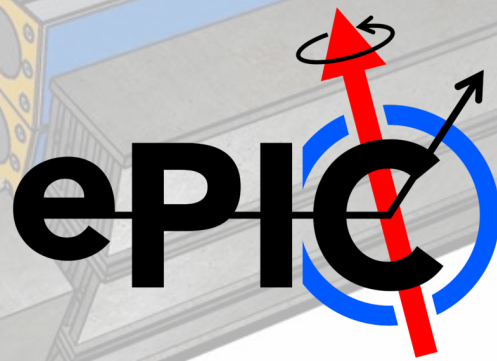


A detailed 3D cutaway diagram of the ePIC detector. The detector is cylindrical and composed of several concentric layers. The outermost layer is a blue segmented structure. Inside, there are green and yellow layers, followed by a central region with a grid-like structure. The diagram shows the complex internal geometry and components of the detector.

ePIC Collaboration News

J. Lajoie, S. Dalla Torre

May 30, 2024



Hey John, start the recording....

Today's Agenda

ePIC General Meeting

Thursday May 30, 2024, 7:30 PM → 9:00 PM US/Eastern

Description **Connection Information:** <https://www.zoomgov.com/j/16028186096?pwd=dndBRnBFSkxkN3RITnNLZIRITjZKQT09>

Recording:

- 7:30 PM → 8:40 PM** **General Status and Updates**
Conveners: John Lajoie (Oak Ridge National Laboratory), Silvia Dalla Torre (INFN, Trieste)
- 7:30 PM** **ePIC Collaboration News**
Speakers: John Lajoie (Oak Ridge National Laboratory), Silvia Dalla Torre (INFN, Trieste) 20m
- 7:50 PM** **EIC Project News**
Speakers: E. C. Aschenauer (BNL), Rolf Ent (Jefferson Lab) 20m
- 8:10 PM** **Discussion**
Speakers: John Lajoie (Iowa State University), Silvia Dalla Torre (INFN, Trieste) 10m
- 8:40 PM → 9:00 PM** **BIC In-Person Workshop Summary**
Speaker: Maria Zurek (Argonne National Laboratory) 20m

What is ePIC

What is ePIC

JLab, Jan. 2023



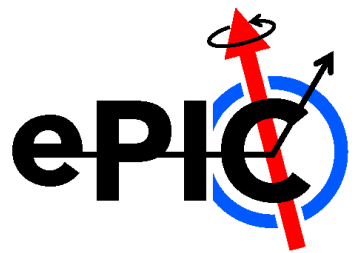
Warsaw, July 2023

ANL,
Jan. 2024



ePIC is a community of scientists dedicated to realizing the EIC science mission.

The ePIC Collaboration is as unique as the ePIC detector.



International

ePIC Initiated in July 2022

Currently: >850 collaborators (from 2024 Institutional Survey)

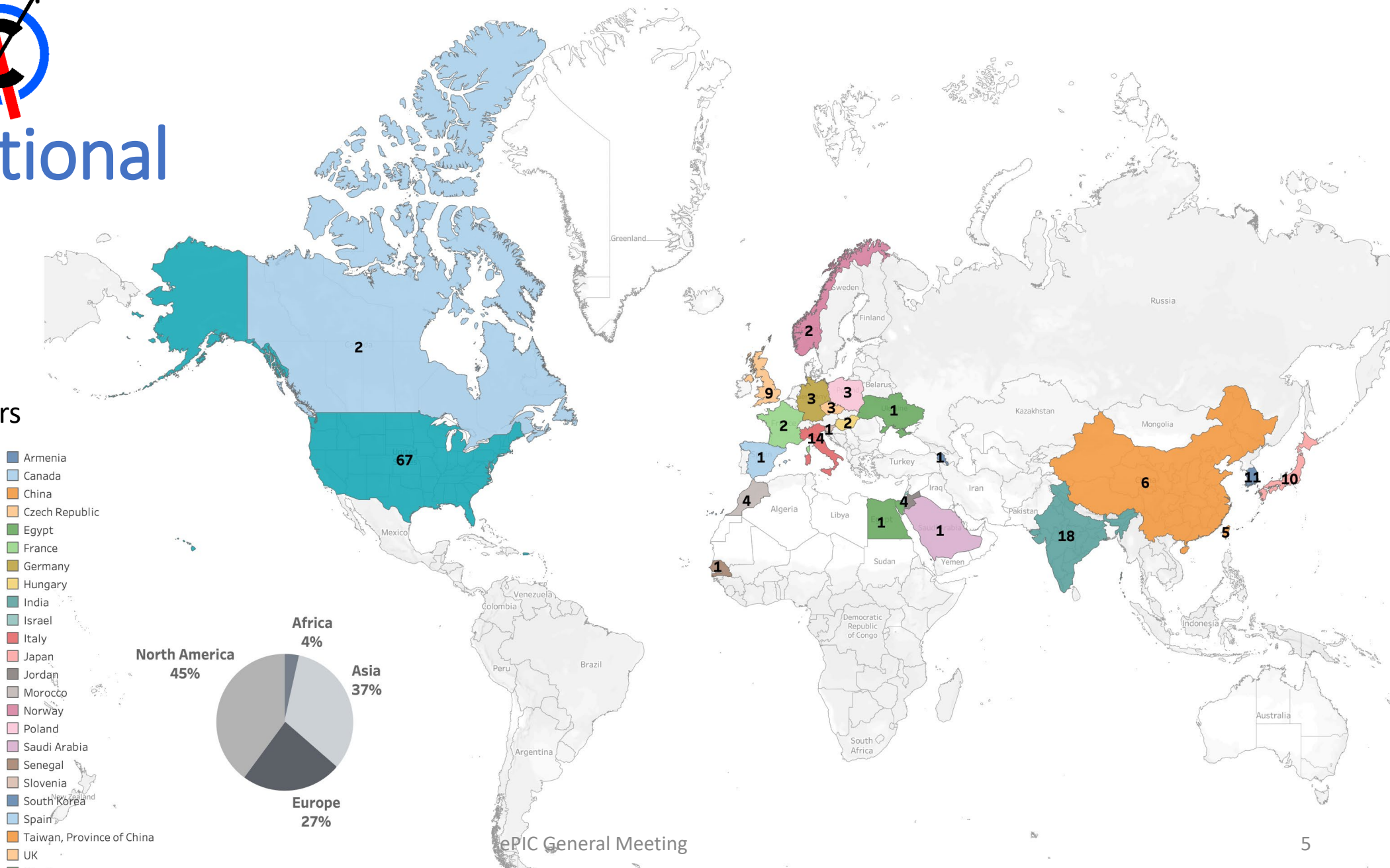
>650 members active in ePIC activities

5/30/2024

ePIC Institutions
173

ePIC Countries
25

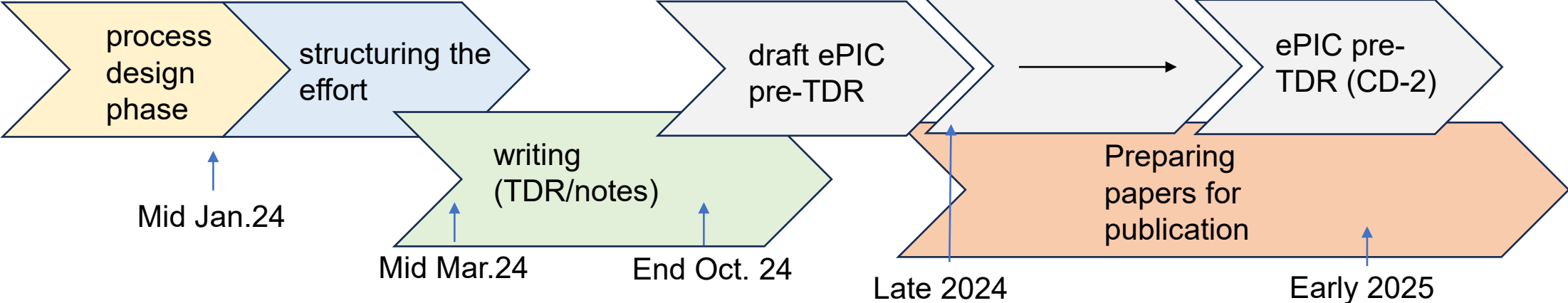
ePIC World Region
4



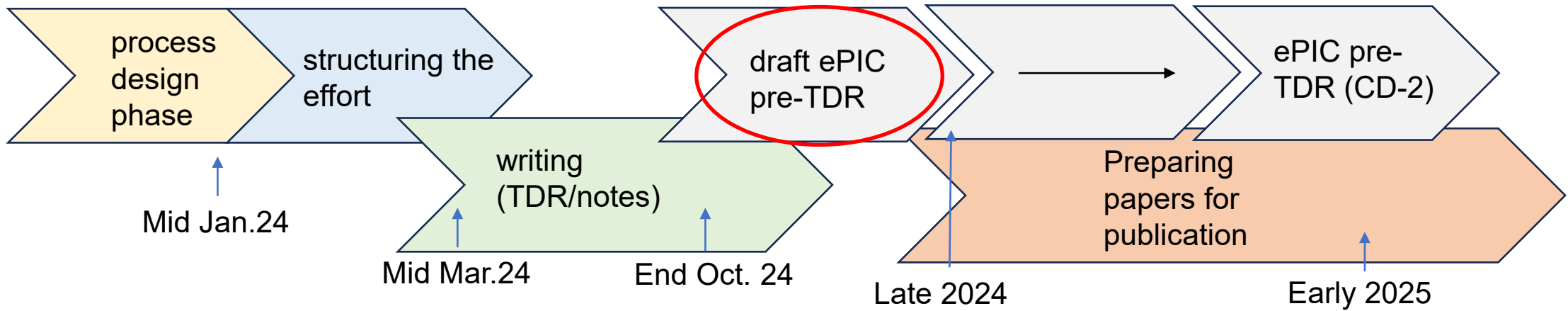
ePIC General Meeting

5

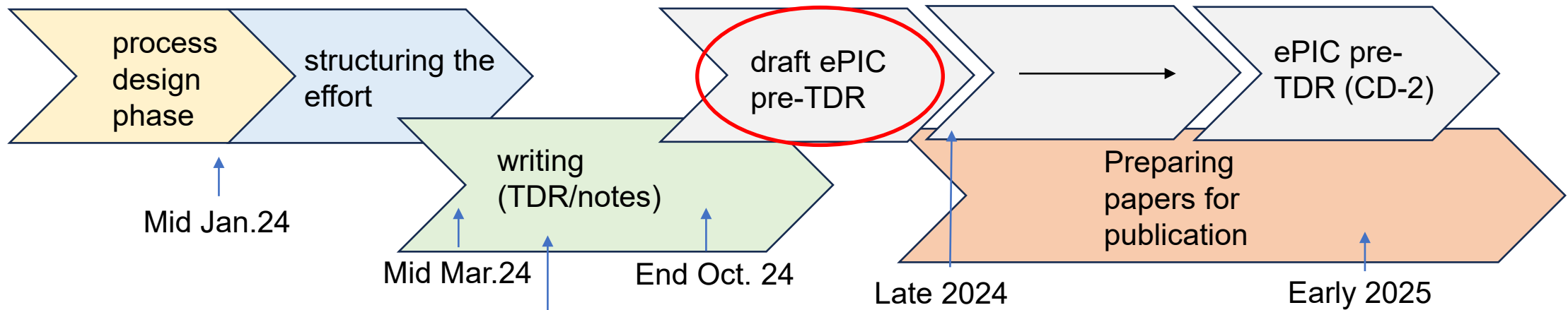
Timeline



Timeline



Timeline



Putting the tools in place:

- Progress on Overleaf/Github for TDR (TBA)
- Recommendation for Document Database Solution

NOTE: Zenodo.org recommended as Doc. DB Solution at May 17th General Meeting. Feedback requested:
https://docs.google.com/forms/d/e/1FAIpQLSfW2o0JxkkSC8m3CD7cExHpH2YJ1QA_IJcG-kwrTnS42kj8g/viewform

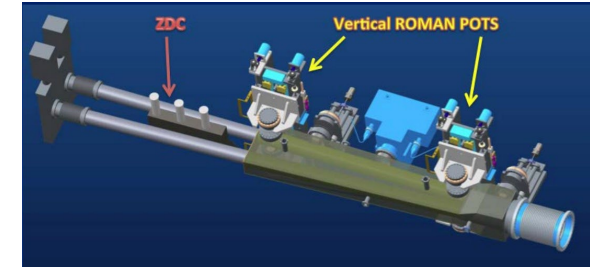
Current TC-office Activities

- Requirements for the **Detector DB** finalized (after collecting community inputs and two passes at TIC meetings); they can be read at:
<https://docs.google.com/document/d/1ow1nfy8dsrI1CfTBkG6kUJ0Oy2MZONhAktLy-zevJ1E/edit>
 - Next step initiated: identification and selection of the technical tool (together with SCC)
- **Pre-TDR activities**
 - Monitoring the DSC progress with periodic reports at the TIC meetings
 - Structuring the overleaf document where the DSC inputs will be collected
 - Follow-up on main TC-office priorities for simulation studies (pre-TDR oriented)

TC-office Priorities for Simulation Studies (pre-TDR oriented)

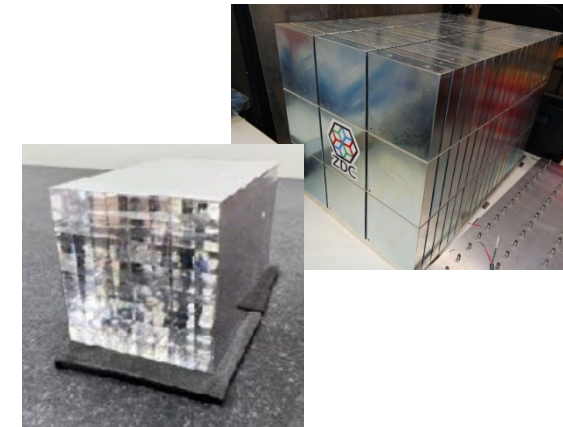
- Studies for subsystems where there are technical aspects still open:
 - Simulations dedicated to soft gamma and to vector meson production in order to optimize the **ZDC configuration**
 - Motivation and requirements for the **backward HCal**
 - Needs in term of space resolution for the **outer MPGD**
 - Impact on physics of **dRICH with single vessel vs dRICH with split vessel**
 - B0 calorimetry performance: **LYSO vs PbWO₄**

Pre-TDR effort, updates



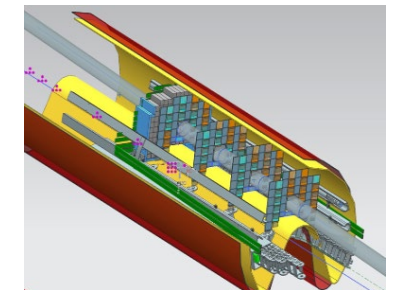
• Far Forward:

- RPs and OMDs - Reconstruction software: working on global solution to handle beam effects and crossing angle, particularly relevant in FF
- ZDC – progress in performance simulations physics for standard benchmarks (Λ^0 , vector mesons) and low energy photons; ongoing testbeam at STAR of the ZDC-HCal prototype
- B0 – On the pre-TDR time scale, no dedicated laboratory/testbeam/prototyping studies are planned → support will come from the studies of AC-LGAD from RP/OMD program and crystal calorimetry with ZDC.



• Electronics/Read-out/DAQ:

- Preparation for the Electronics and DAQ PDR #2, which is scheduled on June 10-11. Included: final design review for IPGbt /Vtrx+, LLP items for CD3-B.



Specialized reports

- **Photosensors for Cherenkov PID:**
 - HRPPDs – 6 (+1) received; nice global performance and good QE
 - Commercial MCP-PMTS – the market for 2-inch devices is now restricted to PHOTEK
 - SiPMs – New strategy to cope with the increased neutron fluence in the sensor region from the most recent studies; options for a novel SiPM from Hamamatsu (not yet commercialized) with quartz window and lower dark count rates
- **ASTROPIX:**
 - AstroPix3 and quad-chip AstroPix3 (to validate daisy chain approach) under test.
 - AstroPix4 for progressing (smaller size) under validation
 - Next steps: AstroPix5 full size. It will be the first fabrication with a new foundry: AMS

Next ePIC Collaboration Meeting



- Lehigh University
Bethlehem, PA
- July 22-28
- Jointly organized with
the EICUG
- Joint session with talks
of common interest
- ePIC Meeting
July 24-28th
- Registration is OPEN!

<https://indico.bnl.gov/event/20727/>

High-Level Agenda July 22-28

Monday July 22	Tuesday July 23	Wednesday July 24	Thursday July 25	Friday July 26	Saturday July 27	Sunday July 28
Early Career	EICUG	EICUG	ePIC	ePIC	ePIC	ePIC
Early Career	EICUG	Joint session ePIC	ePIC	ePIC	ePIC	
↑ pizza x 40		↑ social dinner		↑ networking reception		

High-Level Agenda July 22-28

Monday July 22	Tuesday July 23	Wednesday July 24	Thursday July 25
Early Career	EICUG	EICUG	ePIC
Early Career	EICUG	Joint session ePIC	ePIC
↑ pizza x 40		↑ social dinner	

- **09:00 - 10:30 First Session**
 - 09:00 - 09:25 Report from Accelerator WG
 - 09:25 - 09:45 Report Polarimetry WG
 - 09:45 - 10:05 Report from 2nd Det. WG (and from discussion)
 - 10:05 - 10:20 Report from DE&I (announcing end-of-day session)
- **10:20 - 10:50 Coffee break**
- **10:50 - 12:30 Start of Joint Session**
 - 10:50 - 11:10 Report from NuPECC LRP
 - 11:10 - 11:40 Report from DOE
 - 11:40 - 12:05 Report from 2nd and 3rd RRB meeting
 - 12:05 - 12:30 Report from NSF
- **12:30 - 14:00 Lunch**
- **14:00 - 15:30 Joint Session**
 - 14:00 - 14:30 Status of ePIC Collaboration
 - 14:30 - 15:00 Report from the EIC Project
 - 15:00 - 15:30 Report from Technical Coordinator
- **15:30 - 16:00 Coffee break**
- **16:00 - 17:30 Last Session**
 - 16:00 - 17:30 Discussion with experts lead by joint DE&I

Draft Structure of the ePIC Collab. Meeting

	Thursday July 25th	Friday July 26th	Saturday July 27th
Morning	Workfests/Parallel Sessions	Collaboration Council*	Plenary Session
Afternoon	Workfests/Parallel Sessions	Workfests/Parallel Sessions	Plenary Session
Evening	Workfests/Parallel Sessions (if needed)	Networking Reception	

*CC agenda TBD, may not use the whole time block

Call for Workfest Proposals!

- Open call to the collaboration:
 - Please work with WG and DSC leadership
 - Please consider overlaps with other WG's and DSC's – talk to each other!
 - Take advantage of the opportunity presented by having so many people i
- Strongly encourage CC WG's to organize cross-cutting sessions!
 - This is more efficient than multiple DSC meetings
- Deadline: **Friday, May 31st**
 - Send proposals to CC and SP leadership
 - Include information on:
 - Names of organizers
 - Time required and requested days
 - Number of people expected (space required)
 - Is this more of a parallel session, “workfest”, hybrid?
- The SP Office, CC Office and Coordinators will work out a schedule in concert with the local organizing committee
 - Depending on the number if requests, we may need to combine sessions, or push some sessions into the evening. We will talk with the proposal organizers before doing this.



Call for Workfest Proposals!

- Open call to the collaboration:
 - Please work with WG and DSC leadership

Workfest Proposals due May 31st at end of day! We will start planning the workfests shortly after that so please don't be late!

- The SP Office, CC Office and Coordinators will work out a schedule in concert with the local organizing committee
 - Depending on the number if requests, we may need to combine sessions, or push some sessions into the evening. We will talk with the proposal organizers before doing this.

Higher Order Collaboration Meeting (NNCM)

As announced by Elke at the April 18th ePIC General Meeting, the next EIC OPA Status Review be held January 7-9th, 2025. While it's great news to have the next review scheduled, unfortunately it conflicts with the anticipated timing of the January 2025 ePIC Collaboration meeting, and we will need to move the meeting.

In considering alternate meeting dates, we were heavily constrained:

- Trying to have the meeting earlier would interfere with the holidays and review preparation
- The week immediately following the review would be too heavy a burden and hurt participation
- Delaying until February would delay the spokesperson election
- Moving to the end of January would conflict with the Lunar New Year celebrations
- Having the collaboration meeting shortly after the review allows us to capitalize on momentum from the review

Based on these considerations, we are constrained to a single week for the next ePIC collaboration meeting: ***Jan 20-24th, 2025***. We realize that classes will have started at many universities and this may make attendance difficult for some, but there is no perfect option at this point.

We have informed the three groups that were developing proposals to host the meeting so they can adjust their proposals accordingly. Because the timing of the meeting has changed, we are re-opening the call for additional proposals to host the meeting until May 31st, 2024. A proposal should at a minimum address the following points:

1. We plan on a 5-day collaboration meeting January 20-24th, in a mixed parallel/plenary format. The proposal should include a set of preferred dates in the first half of January.
2. The room for the plenary session should be able to accommodate approximately 170 people. There should be 4-5 smaller rooms for the parallel sessions, each able to accommodate approximately 30-40 people. Session statistics from the January 2024 collaboration meeting at ANL can be found at:
<https://indico.bnl.gov/event/21564/contributions/86335/attachments/52481/89763/Session-Statistics.pdf>
3. ePIC Collaboration meetings will continue to be hybrid. Seamless integration of virtual participants is important. We would need to know how the Zoom conferencing would be handled for both parallel and plenary sessions, what support would be available, and if registration would be required for virtual participants.
4. The venue should be arranged to encourage personal interactions between ePIC collaborators
5. International travel to/from the venue should be detailed, including visa requirements for entry into the host country
6. Any special requirements for site access (advance registration, etc.) should be detailed
7. Availability and logistics for lodging should be detailed
8. The estimated registration fee should be presented, along with what is proposed to be included in the registration fee

- Revised call sent to collaboration April 29th
 - Change of dates due to CD-3B review
- Jan 20-24th, 2025
- Two proposals received so far
- Deadline May 31st

Call for Talk Nominations:

<https://forms.gle/HV7x14n726QCqtrNA>

Diffraction and Low-x 2024

Palermo, Sicily, Italy, September 8-14, 2024, <https://indico.cern.ch/event/1354173/>

- **"eA diffraction at the EIC with ePIC"**
- **"Exclusive lepton pair production and BSM prospects with ePIC"**

DNP meeting in Boston, workshop "QCD Towards the EIC"

October 7th at the fall DNP meeting in Boston, MA, <https://web.mit.edu/dnp2024/index.html>

- **"ePIC - Exploiting the EIC on Day 1"**

PWG Conveners Rotation

- Physics WG's
 - Conveners were originally endorsed for 1 yr/2 yr terms
 - Half of the existing PWG conveners due to rotate off
 - Plan to present new conveners to the CC for endorsement at July Collaboration meeting
- Nominations (including self-nominations) solicited:
https://docs.google.com/forms/d/1ggaES-nWqbWf-k_2Hky4dBDIcOK9ezJRQKTDCWVRU90/edit
- Deadline – Friday, June 7th

SIDIS:

Charlotte Van Hulse
- 1 year
Stefan Diehl - 2 years

BSM:

Michael Nycz - 1 year
Ciprian Gal - 2 years

Inclusive:

Claire Gwenlan - 1 year
Tyler Kutz - 2 years

Exclusive:

Rachel Montgomery
- 1 year
Raphael Dupre - 2 years

Jets/HF:

Brian Page - 1 year
Olga Evdokimov - 2 years

EIC Advocacy Letter

- Advocacy letter to Energy and Water Committee leadership.
- Organized by EICUG
- Sent to EICUG non-.gov/.org email list

- Letter available [here](#)

- Consider expressing your support by signing the letter

- <https://forms.gle/rxEXdNiogx6pSYnT8>

May 13, 2024

The Honorable Chuck Fleischmann
Chairman
Energy & Water Subcommittee
House Appropriations Committee
2362-B Rayburn House Office Building
Washington, DC 20515

The Honorable Marcy Kaptur
Ranking Member
Energy & Water Subcommittee
House Appropriations Committee
1036 Longworth House Office Building
Washington, DC 20515

Dear Chairman Fleischmann and Ranking Member Kaptur:

As members of the Electron-Ion Collider User Group (EICUG), a diverse community of more than 1550 physicists from 109 laboratories and universities across 34 U.S. states, and over 180 international institutions, we write to you today to express our strong support for the Department of Energy's (DOE) Electron-Ion Collider (EIC) project — a collaboration between Brookhaven National Lab and Jefferson Lab — and urge you to support at least \$150 million in the Fiscal Year 2025 (FY25) Energy and Water Development appropriations bill for its construction, consistent with the project plan.

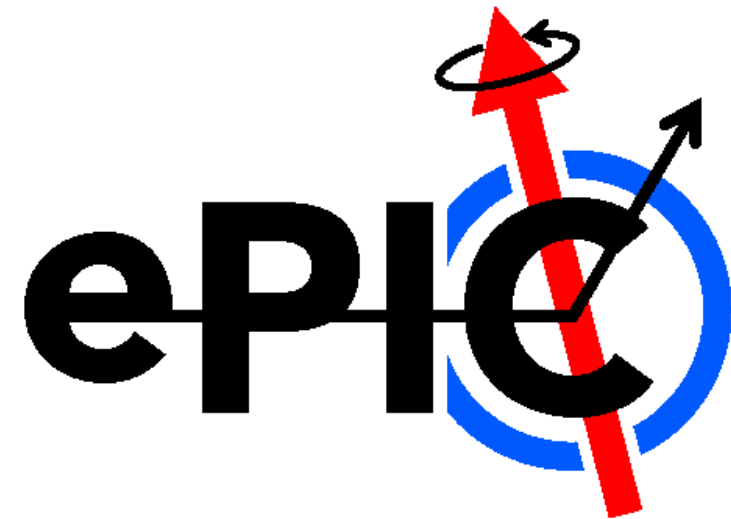
The world-leading, one-of-a-kind EIC will maintain America's leadership and competitiveness in nuclear, accelerator, detector, and computing science — areas that are essential to economic advancement, national security, and technological development — for decades to come. It will do so by repurposing significant parts of the Relativistic Heavy Ion Collider (RHIC) at the conclusion of its science campaign in FY25, saving billions of dollars to construct the EIC, which will be the only operating particle collider in the United States. The recently released [2023 Long Range Plan for Nuclear Science](#), *A New Era of Discovery*, recommends “the expeditious completion of the EIC as the highest priority for facility construction.” The plan goes on to note that because it is the first collider of its kind to be constructed in the world, “leading-edge accelerator and detector technology developments at EIC will have a “broad impact” on “industry, medicine, and security.”

Stable and sustained investments in fundamental science research are the lifeblood of our nation's innovation ecosystem, and support the scientists, engineers, and technicians performing these critical activities. Many in our community advocate for strong and sustained funding with modest annual increases for the Office of Nuclear Physics as recommended by the Long Range Plan, and maintain that the nuclear physics research agenda is best enabled through a balanced scientific portfolio that includes the construction of new capabilities. To that end, as Congress develops and considers its appropriations bills for FY25, we also ask that you support robust funding for the Office of Science and its Office of Nuclear Physics, ensuring that the broader research program is not compromised.

It is important to note that \$150 million for the construction of the EIC would ensure the project can complete preliminary and final design work as planned and would be ready to start construction in 2026. This funding would also support the construction of the EIC's first experimental hall, which will be the first of its kind in the world.

Summary

- Making progress on draft TDR development timeline
 - RRB shows strong international support
 - The ePIC Collaboration is strong, engaged and growing!
-
- Next ePIC General Meeting:
Friday, June 14th @ 7:30PM ET
 - Register now for the Joint EICUG/ePIC
meeting at Lehigh July 24-28th





Upcoming Review Schedule

- Design Reviews
 - ✓ PDR2: IR Integration and Auxiliary Detectors – February 12, 2024 – main emphasis on baseline choices and progress
 - ✓ PDR1: Tracking Detectors – March 20-21, 2024 – main emphasis on baseline tracking layout, if we are on track and plans
 - ✓ ePIC/EIC Detector R&D Day – March 25 – check R&D progress and outlook to FY25
 - PDR2: Electronics/DAQ – June 10-11, 2024 – continuation of PDR1 to ensure we are on track and show progress; FDR for VTRx+/IpGBT
 - PDR: Integration, Infrastructure and Installation – Summer/Autumn 2024? – includes detector support structures
 - PDR2: Particle Identification Detectors – Summer 2024?
 - PDR2: Barrel EM Cal – Summer/Fall 2024 – emphasis on mechanical design & AstroPix readiness
 - FDR: Backward & Forward EM Calorimetry, Barrel & Forward HCAL – Fall 2024
 - PDR2: Polarimetry – timescale TBD (but before CD-2)
 - FDR for any potential CD-3B scope: Magnet Power Supply, perhaps VTRx+/IpGBT, perhaps magnet steel – see NOTE
 - FDR Magnet Power Supply – Spring 2024; Magnet Steel perhaps Summer 2024
- DAC-Meetings 2024 under planning:
 - ~April 2024: Project Status, Baseline Detector, International Engagement, Detector R&D progress (expect 1+ day)
 - ~August 2024: Detector R&D annual review (expect 2 days) – deadline for submission July 1, 2024
- Next ePIC Computing & Software review by host labs: ~October 2024?
- EIC Project Review ~ November 2024
 - Collaboration goal is to have a draft of the pre-TDR ready for this review

ePIC Collaboration Web Presence

Integrated into the main EIC website through the top navigation. Page contains contact information and link to the ePIC Wiki.

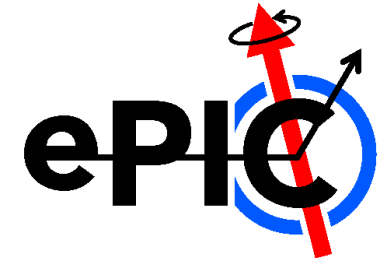
Gary Schroeder, Karen McNulty
Walsch, Thomas Ullrich, JGL

Animations courtesy of UC Riverside group.

Continuing to update and improve.

<https://www.bnl.gov/eic/epic.php>

The screenshot displays the ePIC Collaboration website interface. At the top, a dark green navigation bar contains the text "Electron-Ion Collider" on the left and a series of menu items: "GOALS", "THE MACHINE", "BENEFITS", "SCIENCE", "DETECTOR", "NEWS", and "IMAGES". Below this, a large banner features the title "The Electron-Ion Collider" in white, with a subtitle "A machine that will unlock the secrets of the strongest force in Nature" in yellow. A white arrow points from the "DETECTOR" menu item to the banner. The main content area is divided into two columns. The left column has a dark background with a grid pattern and a small red dot, with text that reads: "The computers and smartphones we use... learned about the atom in the last century... much of our economy today—relies on und... force between the atomic nucleus and the... science of that force is well understood bu... microcosm within the protons and neutron... nucleus. That's why Brookhaven Lab is bui... Electron-Ion Collider, or EIC—to look *inside*... neutrons." The right column features a large 3D cutaway diagram of the detector, showing internal components in various colors (blue, green, yellow, red). Below the diagram, the text "The ePIC Collaboration" is displayed in large white font, followed by "Building the world's most sophisticated particle detector for analyzing collisions between electrons and protons or other nuclei". At the bottom of the page, a dark green footer contains the text: "The Electron-Proton/Ion Collider (ePIC) Collaboration was formed to design, build, and operate the first experiment at the Electron-Ion Collider, a one-of-a-kind particle collider at Brookhaven National Laboratory." and "ePIC is a collection of hundreds of scientists and engineers united in a quest to understand the structure... In the process of building and eventually using this detector to do groundbreaking science, we'll be".

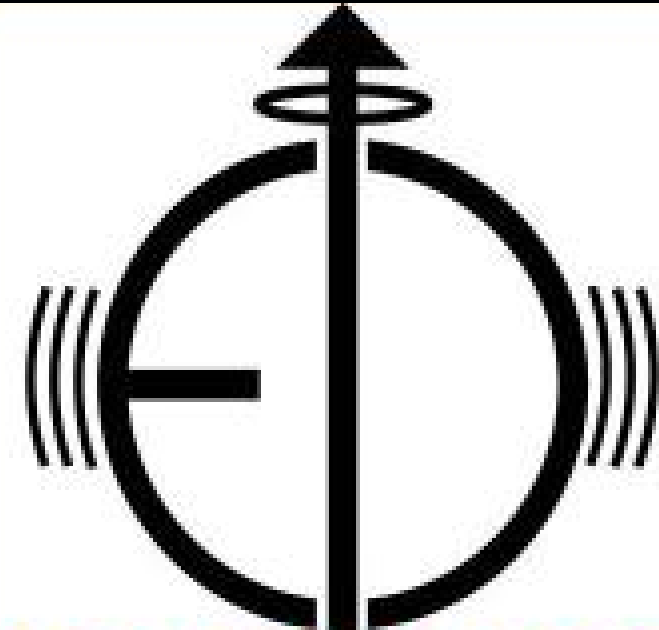
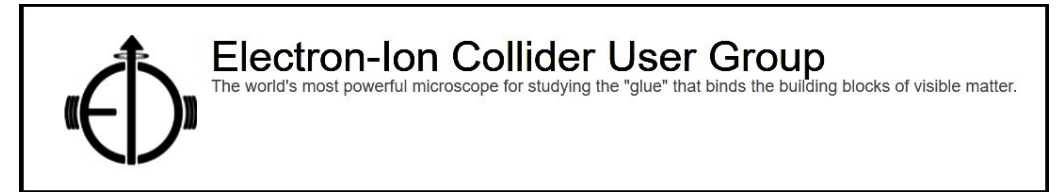


ePIC Resources

- Public Website - <https://www.bnl.gov/eic/epic.php>
- Mailing Lists – <https://lists.bnl.gov/mailman/listinfo>
- Indico Agenda - <https://indico.bnl.gov/category/402/>
 - ePIC Software and Computing: <https://indico.bnl.gov/category/435/>
- Wiki - <https://wiki.bnl.gov/EPIC>
- ePIC Software Training:
 - Landing Page: <https://eic.github.io/documentation/landingpage.html>
 - Tutorials: <https://eic.github.io/documentation/tutorials.html>
- Mattermost: <https://chat.epic-eic.org>

EICUG Membership

- The EICUG is a vital organization to promote the interests of the EIC community!
 - Without the EICUG we would never have gotten far enough to form ePIC!
- Please register your institution!
- Check with your EICUG IB representative to get registered as a member
- <https://www.eicug.org/content/join.html>



Upcoming Notable Events...

- DIS 2024 in Grenoble, France April 8-12th , 2024
 - <https://lpsc-indico.in2p3.fr/event/3268/>
- ePIC Software and Computing meeting @ CERN April 22nd-26th
 - <https://indico.cern.ch/event/1343984/>
- EIC RRB Meeting – May 6-7th in Italy
- MC4EIC @ Durham University June 5-7th
 - <https://conference.ippp.dur.ac.uk/event/1292/>
- JLab Users Meeting, June 8-12th
 - <https://www.jlab.org/conference/2024-jluo>
- 4th EIC-Asia Workshop in Shanghai July 1-5, 2024
 - <https://indico.cern.ch/event/1361239/>
- Joint EICUG/ePIC Collaboration Meeting @ Lehigh University July 22nd-28th
 - <https://indico.bnl.gov/event/20727/>



High-Level Agenda July 22-28 (DRAFT)

Monday July 22	Tuesday July 23	Wednesday July 24	Thursday July 25	Friday July 26	Saturday July 27	Sunday July 28
Early Career	EICUG	EICUG	ePIC	ePIC	ePIC	(ePIC)
Early Career	EICUG	Joint session	ePIC	ePIC	ePIC	
↑		↑		↑		
pizza x 40		social dinner		networking reception		

High-Level Agenda July 22-28 (DRAFT)

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Early Career	EICUG	ePIC	ePIC

↑
↑

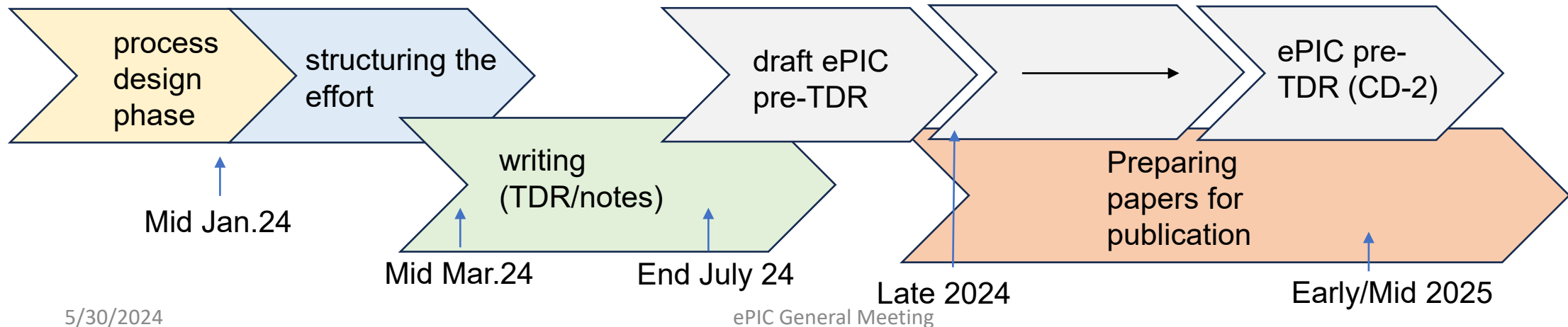
pizza x 40

social dinner

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TDR Strategy and Publications

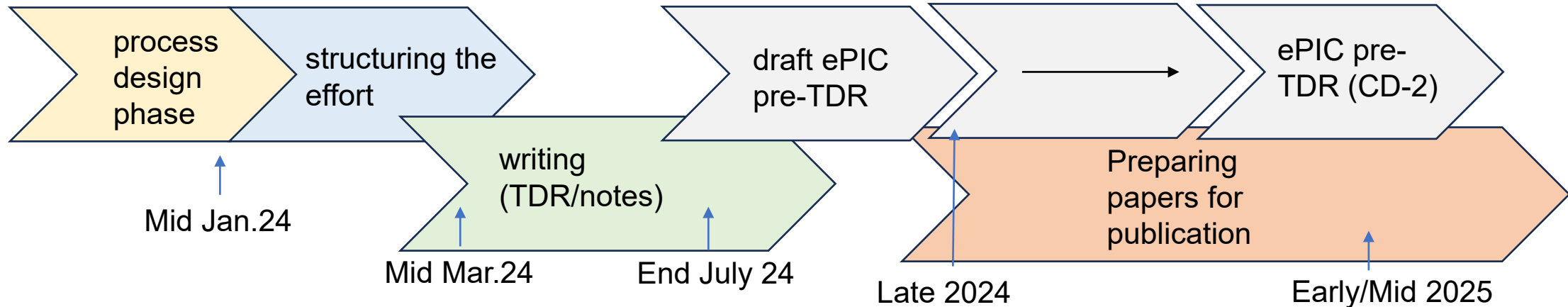
- In 2024 the ePIC collaboration will produce:
 - The ePIC contributions to the EIC TDR
 - The EIC TDR is the top priority
 - Chapters on *Physics Goals and Requirements* and *Experimental Systems*
 - Not just the document, but the simulations and detector R&D that form the basis
 - Requires close cooperation between the collaboration and the project!
- An ePIC Detector Design paper:
 - Derived and expanded from the *Experimental Systems* TDR chapter
- An ePIC Physics Performance paper:
 - Derived and expanded from the *Physics Goals and Requirements* TDR chapter
- Both to be published in a scientific journal (such as NIMA, JINST, or PRC)
- These publications will serve as a focus in developing the ePIC Membership and Publication policies.



TDR Strategy and Publications

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Focused activity in the TIC:
Report by Silvia to follow

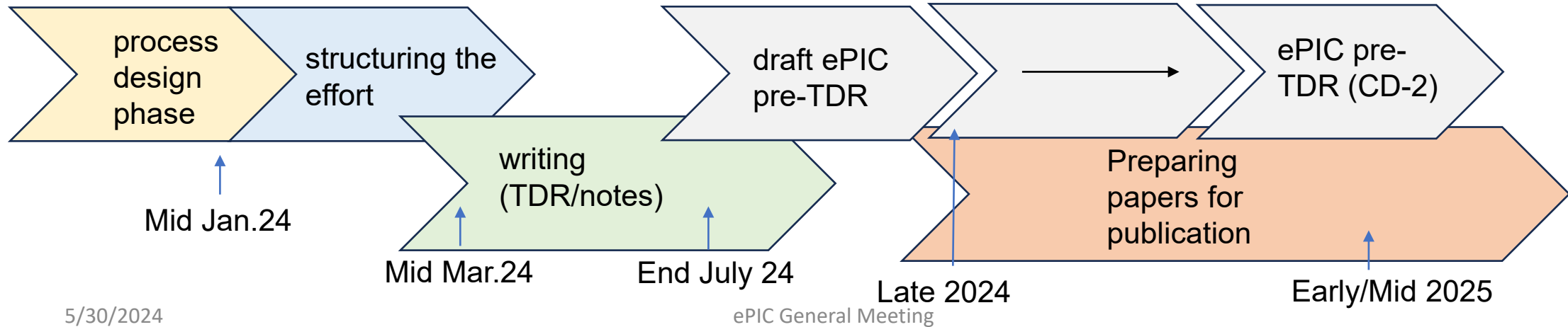


TDR Strategy and Publications

- In 2024 the ePIC collaboration will produce:
 - The ePIC contributions to the EIC TDR
 - The EIC TDR is the top priority
 - Chapters on *Physics Goals and Requirements* and *Experimental Systems*
 - Not just the document, but the simulations and detector R&D that form the basis
 - Requires close cooperation between the collaboration and the project!
 - An ePIC Detector Design paper:
 - Derived and expanded from the *Experimental Systems* TDR chapter
 - An ePIC Physics Performance paper:
 - Derived and expanded from the *Physics Goals and Requirements* TDR chapter
- Both to be published in a scientific journal (such as NIMA, JINST, or PRC)
- These publications will serve as a focus in developing the ePIC Membership and Publication policies.

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AC Report in last General Meeting:
<https://indico.bnl.gov/event/21562/>

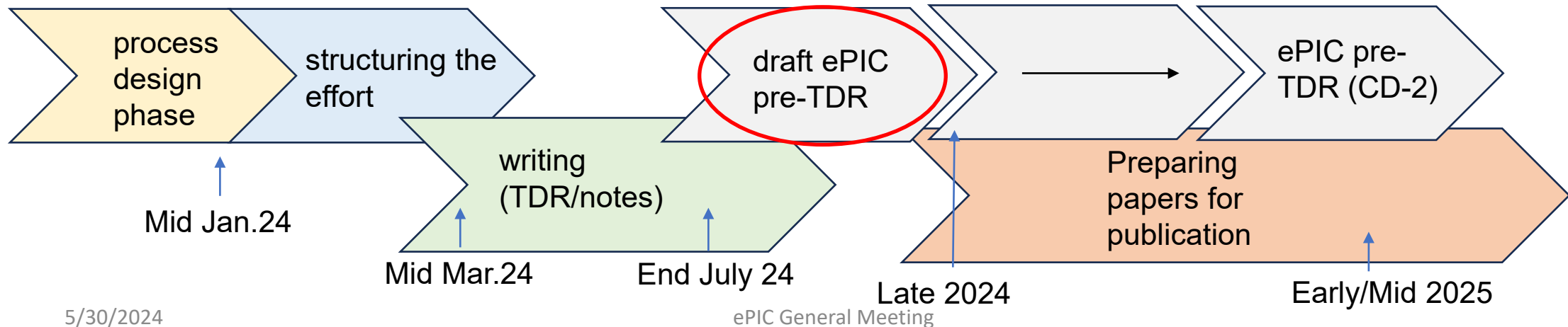


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Rotation of PWG Conveners

- Physics WG's
 - Conveners were originally endorsed for 1 yr/2 yr terms
 - Half of the existing PWG conveners due to rotate off
 - Do not want to create disruption at a time when we are trying to ramp up efforts for the TDR
 - Plan to present new PWG conveners to the CC for endorsement at July Collaboration meeting
 - Follows split of CC elections
 - Allows time for AC's to consider/develop candidates
 - This is an opportunity to rotate experienced ePIC members to new roles!

Contact the Analysis Coordinators (Rosi and Sal) with suggestions and nominations!

SIDIS:

Charlotte - 1 year
Stefan - 2 years

BSM:

Michael - 1 year
Ciprian - 2 years

Inclusive:

Claire - 1 year
Tyler - 2 years

Exclusive:

Rachel - 1 year
Raphael - 2 years

Jets/HF:

Brian - 1 year
Olga - 2 years

Third EIC RRB Meeting

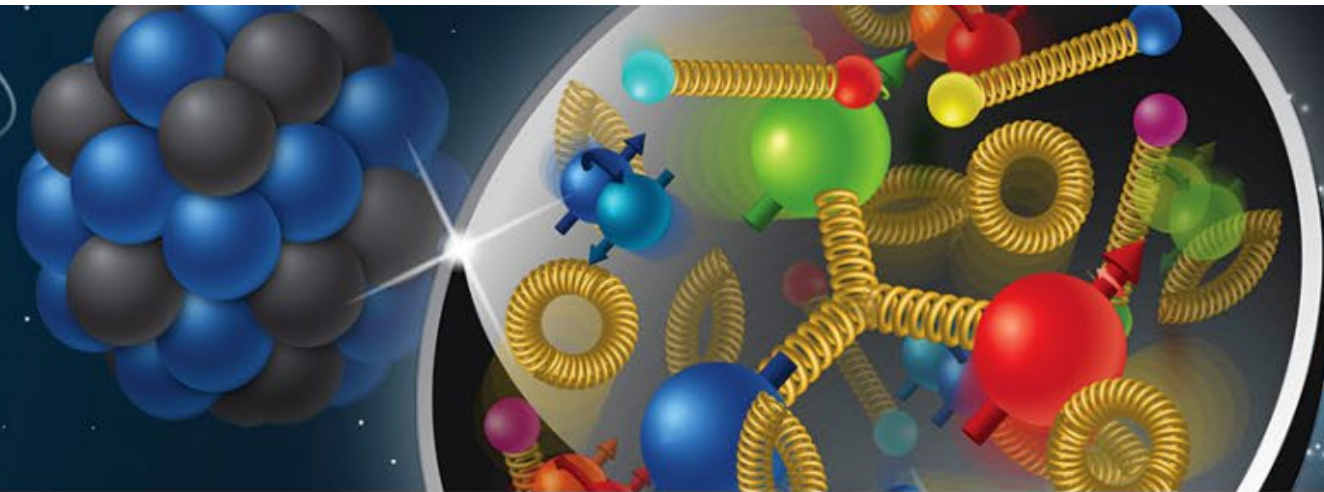
- Hosted by INFN May 6-7th in Rome
- Comprised of the representatives of the international funding agencies supporting institutions collaborating on the EIC detector(s) and representatives from the two host labs.
 - The EIC-RRB will provide coordination during detector development, construction, and operations.
- Agenda included presentations by ePIC Spokesperson, TC and SCC



Electron-Ion Collider

Resource Review Board (RRB) Meeting

Hosted by the National Institute of Nuclear Physics (INFN)
May 6-7, 2024



RRB Recap

- EIC Project:
 - Project status and CD-3B Review – January 7-9, 2025 (approval March 2025)
 - CD-2/3 approval end of 2025 (note: two in one year!)
 - Discussion of breaking up CD-2/3 into subprojects
 - **NOTE:** None of this affects the collaboration's schedule!!
 - iCRADA/PPD's progressing
- EIC Collaboration:
 - Delivered the message that the collaboration is strong, growing and engaged
- In-kind contributions to computing:
 - Still some confusion over the relationship between the ECSJI and RRB
- Common Funds:
 - Presented common funds proposal, little discussion
 - Explicitly includes category to fund collab positions, visiting scientists
- Comments by Members and Observers:
 - Plans for in-kind more concrete than in past, advancing
 - Significant advances in schedules for Japan, Taiwan, Korea
- Global Engagement Strategy
 - Build on efforts from HEP community?



EIC Common Funds

- Following the Dec. 2024 RRB a Common Funds Working Group was formed:
 - Rolf Ent, Rosario Nania, Abhay Deshpande, John Lajoie
- WG returned to the RRB May 6-7th with a draft for discussion:
 - Starting point was CERN LHC document “Commissioning, Maintenance and Operations of Experiments at the LHC” (CERN/RRB-D 2001-04 14 March 2001)
 - Modifications necessary to account for differences between CERN and a DOE Project/Facility, but this provides a starting point many in the RRB are familiar with.
 - Working draft document for discussion. The document provides the *framework* for agreements with funding agencies.
 - Next steps will include clarifying integration of computing in-kind contributions

Funding Categories

- **Category A** concerns equipment built using Common Funds e.g. magnets, or services and operations common to the whole experiment e.g. software licences.
 - Cost-sharing typically by scientists (authors)
- **Category B** concerns maintenance of equipment built by a sub-set of the collaboration, mainly sub-detectors.
 - Cost sharing typically by capital investment
- **Category C** concerns collaboration support using Common Funds, e.g., support for travel and as-needed time for key Collaboration functions, local co-support of travel for visiting scientists, and general support for a global strategy to allow for underprivileged scientists to participate in EIC science.
 - Cost sharing TBD (new category)
- **Category D** concerns items for which the DOE and US host laboratories would naturally assume responsibility for, e.g. costs to run the accelerator which sets the weeks of operations and schedule, infrastructure for the experimental areas and experiments and infrastructure operations costs, survey and alignment, and the overall Environmental, Health, and Safety aspects for detector operations.
- Category A, B very similar to LHC. Category D (EIC) is the same in spirit as Category C (LHC). Category C (EIC) is new and was created explicitly to support visiting scientists, etc.

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M&O Categories

Categories are substantially updated from LHC document. One of the main differences is that operations are covered by the host laboratory, so anything that might look like operations here is only above and beyond what the host lab would be expected to contribute.

Changes also made to account for ePIC Streaming Computing Model and new Category C support, including support for paid positions in the collaboration.

Detector related costs		Test beams and calibration facilities	
Gas consumption	A	General operation	A
M&O of gas systems	A	Upgrades	A/B
M&O of cooling systems (incl. consumption)	A	Common electronics and DAQ	A
M&O of moving/hydraulic systems	A	Test and Diagnostic Equipment	A/B
Shutdown maintenance and operation	A	Counting & control rooms	A
Magnet power supply maintenance	A		
UPS maintenance for common systems	A		
Sub-detector electronics maintenance	B		
Beam pipe	A		
Counting & control rooms	A		
Test and Diagnostic Equipment	A		
Computing		Special Services*	
Echelon-0 data storage	A	Laboratory instruments	A/B
Echelon-0 computing hardware	A	Test and Diag. Equipment	A/B
Echelon-1 recording media	A	Assembly and active storage areas	A/B
Echelon-1 data storage	A	Workshops	A/B
Echelon-1 computing hardware	A	Cooling, ventilation, and pumps	A/B
Echelon 2 data storage	A	Heavy transport	A
Echelon 2 computing hardware	A	Cranes	A
Detector controls	A	Transportation	A
Detector safety systems	A	Passive storage space	A/B
Computer/LAN maintenance/replacement	A	Engineering	A
System management	A		
Software license fees	A/B		
Common desktop infrastructure	A		
Data management	A		
		Communications	A
		Cellular phones	A/B
		Videoconferencing	A/B
Collaboration Secretariats		Outreach	
Photocopying machines, fax, printers	A	Outreach events and activities	A
Printing and publication costs	A		
Secretarial assistance	A		
Support for Visiting Scientists	C		
Support for Collab. Positions (TC, RC)	C		

CTC Policy Draft Feedback: Deadline Extended to May 22nd

- Given the very limited responses received thus far, we kindly urge all member institutions of our collaboration to collectively review the draft policy.
- Your input is invaluable to us, and we welcome any questions, comments, or suggestions you may have.

Please communicate these through your designated CC representative(s) at your earliest convenience. Ideally, feedback should be submitted using the following form: <https://forms.gle/WQcsMMp4XbCv8ADL7>