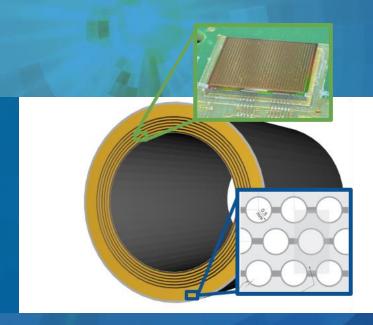
### The ePIC Barrel Imaging Calorimeter

## **BIC News**



Jessica Metcalfe Argonne National Laboratory BIC General Meeting June 17, 2025



## News



- BIC Logo Contest
- Joint EICUG/ePIC Collaboration Meeting July 14-18
- AstroPix Workshop hosted by NASA August 18-20
- Detector Advisory Committee Review held June 11-13
- BIC Preliminary Design Review, end of summer

## **BIC Logo Contest**



### Submit your ideas

### Submit your ideas!

- Professionally appropriate
- Be creative
- Submit entries on google drive folder <u>Link</u>
- If you don't have access to the BIC google drive yet, please send request to Jessica, Maria, or Sylvester

### Deadline to submit: July 18

Voting: ~July 21 – August 1 (exact dates might change)

→ Incorporate into the BIC presentation template for the PDR

## Joint EICUG/ePIC Collaboration Meeting



**JULY 14-18** 

### **JEFFERSON LAB**

SUMMER 2025 JOINT EICUG/EPIC COLLABORATION MEETING

## JOINT EICUG/ePIC COLLABORATION

July 14-18, 2025 Jefferson Lab • Newport News, VA



- Link
- Host cross-area workfests → no specific BIC workfest
- Register by July 1

## **AstroPix Workshop**



### **August 18-20**

### **University of Maryland**

Hi all,

This is the 2nd announcement for the upcoming AstroPix workshop which will be held at UMD August 18-20, 2025. This is open to everyone: AstroPix veterans, those who are new to the project, and those interested in learning more/getting involved!If you plan to attend please fill out this form: <a href="https://forms.gle/mQfvrLQc5uWiuYgr9">https://forms.gle/mQfvrLQc5uWiuYgr9</a> Details on the workshop can be found in our google drive: <a href="https://forms.gle/mQfvrLQc5uWiuYgr9">August 18-20</a>, 2025. This includes:

- Logistics: <a href="https://docs.google.com/document/d/11U1wtKKSqZRvzlW3dKlp7KwlleecKKoy0vIAa\_7aFGY/edit?usp=share\_link">https://docs.google.com/document/d/11U1wtKKSqZRvzlW3dKlp7KwlleecKKoy0vIAa\_7aFGY/edit?usp=share\_link</a>
- Suggestions for topics: <a href="https://docs.google.com/document/d/1uQotQH5zRemZsMfLfL23IF3QRm423UyEJc\_dGVcVEMA/edit?usp">https://docs.google.com/document/d/1uQotQH5zRemZsMfLfL23IF3QRm423UyEJc\_dGVcVEMA/edit?usp</a> = share link
- And a sign up for a GSFC tour on Thursday: <a href="https://docs.google.com/document/d/14rHAzDIJ31Zk\_wSuJSbWZ4-DhjhKlOe\_EWh0inwLjj0/edit?usp=share\_link">https://docs.google.com/document/d/14rHAzDIJ31Zk\_wSuJSbWZ4-DhjhKlOe\_EWh0inwLjj0/edit?usp=share\_link</a>

If you have any questions, please don't hesitate to reach out. Looking forward to seeing you all in August!

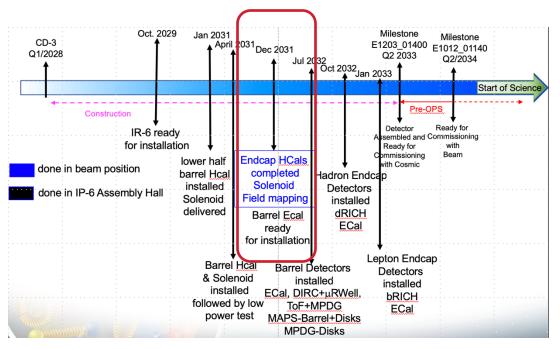
Best, Regina

## **Detector Advisory Committee (DAC)**



### **Review held June 11-13**

- Review indico
- BIC <u>slides</u> can be found on our drive folder
- Closeout will be held on Friday (Note: review etiquette means listening only)



## **BIC Project Phases**



PED: Preliminary Design

PED: Final Design

Preproduction

Production



Preliminary Design Review Summer 2025



Final Design Review Spring/Summer 2026



Need CD3 approval to start production articles ~early 2027
Production Readiness Review



Deliver BIC to BNL

**Dec 2031** 

AstroPix v3

- BabyBCal & Lanky BCal
- Individual components
- First (second) test articles

- AstroPix v5
- One full sector
- Final designs (90%)
- Production style procedures
- AstroPix v6 tests

- AstroPix v6
- 48 sectors

7

## **Preliminary Design Review (PDR)**



### Late August/September

- Scope: preliminary design → 60% of the production design
  - Complete conceptual design implemented in CAD or equivalent
  - Individual test articles that demonstrate key technical challenges
  - Actual test articles that are similar to the production design in most cases
- Dates are being sorted now
  - Proposed Aug 28-29 or any of the first 3 weeks of September
  - Start planning for the earliest possible dates
  - Materials will need to be complete and posted to review committee two weeks ahead → August 15
  - Expect review to be online only
- Preparation
  - Work with project to define an agenda, assign presentations
  - Need inputs from everyone
  - Expect to start late July/early August to compile all materials



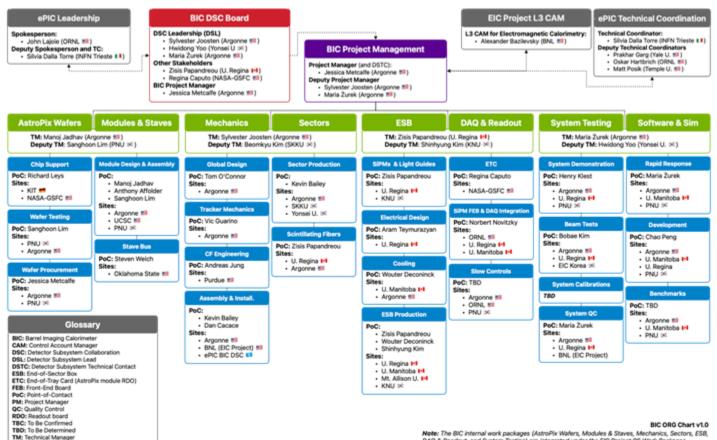
## **Questions, Comments, Suggestions?**





## **BIC Organization Chart**





DAQ & Readout, and System Testing) are integrated under the EIC Project P6 Work Packages

## **BIC Organization Chart**





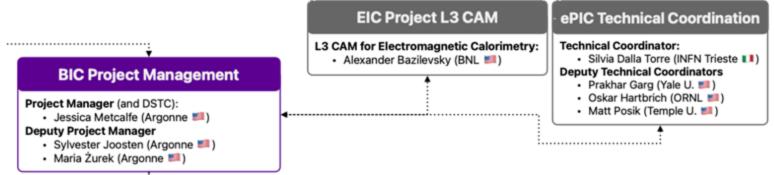
### ePIC Collaboration:

- international user organization
- responsible for community needs, physics performance
- Detector Subsystem Collaboration → Red Team
  - DSL's Detector Subsystem Leads
  - provide oversight to the BIC collaboration
- Detector Subsystem Technical Contact
  - also BIC project manager

# Glossary BIC: Barrel Imaging Calorimeter CAM: Control Account Manager DSC: Detector Subsystem Collaboration DSL: Detector Subsystem Lead DSTIC: Detector Subsystem Technical Contact ESB: End-of-Sector Box ETC: End-of-Tayo Card (Astrolix module RDO) FIB: Front-find Board PoC: Point-of-Contact PM: Peoject Manager QC: Quality Control RDO: Readout board TBC: 10 Be Confirmed TBC: 10 Be Determined TMI: Technical Manager

## **BIC Organization Chart**





### **EIC Project:**

- DOE funded project
  - accelerator & detector
  - responsible for building/delivering
  - US funds for the project are controlled by the Project
- BIC reports to the EM Calorimeter Control Account Manager (CAM)
  - Institutes receive funds via a contract with Statement of Work (SOW)

#### Glossary

**BIC:** Barrel Imaging Calorimeter

CAM: Control Account Manager

DSC: Detector Subsystem Collaboration DSL: Detector Subsystem Lead

DSTC: Detector Subsystem Technical Contact

ESB: End-of-Sector Box ETC: End-of-Tray Card (AstroPix module RDO)

FEB: Front-End Board

PoC: Point-of-Contact PM: Project Manager

QC: Quality Control

RDO: Readout board TBC: To Be Confirmed

TBD: To Be Determined TM: Technical Manager

## **BIC Project Management Team**



BIC Project Management Team



### Purple Team:

**AstroPix Wafers** 

- manage and support the BIC community
- deliver the BIC detector

### **Green Team Leaders:**

TM: Manoi Jadhay (Argonne 1111)

Deputy TM: Sanghoon Lim (PNU M)

manage a major technical area

**Modules & Staves** 

- contact for the BIC community in that technical area
- meet key deliverables and milestones within their area



**BIC Management Roles & Responsibilities** 

## **Meeting Schedule**



### Green Team or Technical Area Meetings:

Wafers: Manoj

Mondays at 4 pm Central—bi-weekly

Modules & Staves: Manoj

Mondays at 4 pm Central—bi-weekly

Mechanics & Sectors: Sylvester

Fridays at 1 pm Central

ESB, DAQ, & Readout: Zisis

Tuesday at 8 am Central—bi-weekly

System Test: Maria

Tuesday at 8 am Central—bi-weekly

Simulations: Maria

Tuesdays at 2 pm Central

### **BIC General Meeting:**

- ~Monthly
- Fridays at 8 am Central
- Organized by Jessica, Maria, Sylvester

### Weekly Summary:

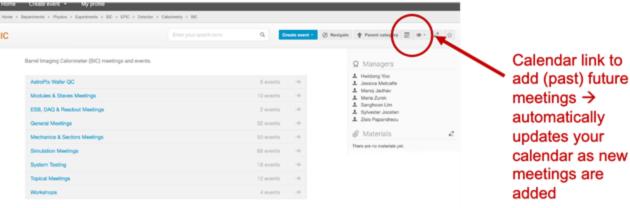
- 1. Mondays @ 4pm
- 2. Tuesdays @ 8am
- 3. Tuesdays @ 2pm
- 4. Fridays @1pm

## **BIC Meeting Indico Calendar**



- Indico link
- All meetings can be found on indico
- You can add the meetings to your calendar
  - All of the BIC meetings from the BIC category

 Or some by going to a sub-category and using the calendar link on that page



### **Documents**



### Zenodo

-ePIC endorsed file management system hosted by CERN -version controlled -share with collaboration -searchable by keywords -critical to get correct <u>keywords</u> -epic-eic & bic

### BOX

-BOX folder for sharing technical drawings -Argonne hosted -request access permissions to anyone in the Purple Team

### Google Drive

-collaborative
 documents → shared
 editing
 -presentations for
 reviews
 -reference documents

## **Design Document Review/Approval**



- Review key designs before fabrication
- Review/Approval Log

- 1) Make the design available on the google drive and fill in description, links, and deadline in the log. Define required approvers.
- 2) Present at a relevant meeting that is announced 1 week in advance (prefer if documents ready in advance, but not required)
- 3) Email BIC list and required approvers with request to review by deadline (minimum 1 week after presentation). Provide links to documents, presentation, comment collection document
- 4) Respond to comments
- 5) Final approval is logged

## **Presentation/Paper Review Process**



For ALL BIC (or ePIC/EIC) related presentations or paper that will be shared outside the collaboration:

- review process to ensure the quality and consistency of results
- Instructions:
  - submit document via zenodo
  - request approval in zenodo and send an email notification
  - approvers for BIC should include Green Team Leader and/or Purple Team





## **Reference Documents**



- BIC Management Roles & Responsibilities
- Interface Document
- Organization Chart
- Risk Register/RAID log
- Presentation/Paper Approval <u>Instructions</u>
- Design Review/Approval Log