Barrel Imaging Calorimeter Meeting, September 19, 2023

Barrel Imaging Calorimeter (BIC)
Updates

Sylvester Joosten
PHY, Argonne National Laboratory





## **Updates**

- Last week final design reviews for SciFi and SiPM
  - Reviews went well!
- Yesterday the Notice of Decision for the barrel calorimeter was formally

signed and posted

- Now officially in the Project!
- Next up:
  - Statements of Work for PED tasks (urgent)
  - Director's review for CD3a



#### **Timeline**

December (TBD)

### Reviews, Reviews, Reviews...

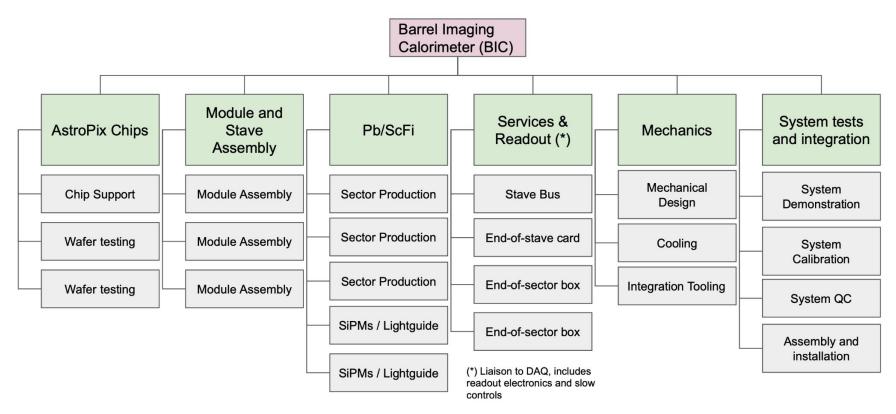
```
July 5 + 6: Particle Identification Detectors Interim Design Review
             Final Design Review of the PbWO4 Crystals for the ePIC Backward
      EM Calorimeter (LLP)
                                                                     More details in
                    DAC Review of Detector R&D
August 28 + 31:
                                                                     Project Update talk
August 29 + 30:
                    ePIC Comprehensive Design Review by DAC
 September 13:
                    SciFi Applications Final Design Review (LLP)
September 14:
                    SiPM Applications Final Design Review (LLP)
September 25:
                    Final Design Review Forward HCAL W & Steel (LLP)
October 5 + 6:
                    Final Design Review of Magnet (MARCO)
October 10-12:
                    DOE CD-3A Director's Review
October 19-20:
                    ePIC Computing Model Review
                    DOE CD-3A Independent Cost Review (Not needed)
November 14-16:
                    DOE CD-3A Independent Project Review
December 7 + 8:
                    2<sup>nd</sup> Resource Review Board meeting @ Washington DC
```

Preliminary Design Review of Far-Forward/Far-Backward Detectors

# **PED Tasks**

Skill	Institution .	FTE ,	, Task
Mechanical Engineer	Argonne	1	Global mechanical design
Mechanical Engineer	Argonne	1	Sector design and test article production
Mechanical Engineer	Argonne	0.5	Stave design and cooling
Machinist	Argonne	0.2	Mechanics support (machining)
Electrical Engineer	Argonne	0.1	Electrical support
Postdoc	Argonne	0.50	Support test article production
FPGA Senior	Argonne	0.1	System test
FPGA Postdoc	Argonne	1	System test
<cf subcontract=""></cf>	Argonne	0.25	CF fabrication
Scientist	Argonne	0.16	Oversight
<nasa engineers=""></nasa>	NASA	1	AstroPix end-of-stave card design
<b>Electrical Engineering Team</b>	Oklahoma S	1	AstroPix Bus tape design
Electrical Engineer	UCSC	0.5	AstroPix module design
Scientist	UCSC	0.2	AstroPix module design
Mechanical Engineer	Regina	0.33	End-of-sector design and test article
Electrical Engineer	Regina	0.4	End-of-sector electrical design
Postdoc	Regina	1	QC test design and test article
Scientist	Regina	0.16	Oversight
<project engineers=""></project>	BNL	0	Integration

#### **Draft ORG-chart for discussion**



# Possible topics for 10-2 TIC meeting

- 1. Intro/status update (including PED tasks and plans) → Sylvester
- 2. Engineering/integration update → Dan?
- 3. SciFi and SiPM FDR summary team Zisis
- 4. AstroPix v3 test update + next steps → Amanda
- 5. R&D plans at FNAL  $\rightarrow$  Henry
- 6. Integration with and relation to other subsystems → Maria
- 7. Simulation/reconstruction needs and status Wouter?
- 8. Readout strategy? → later, need to meet with DAQ WG first