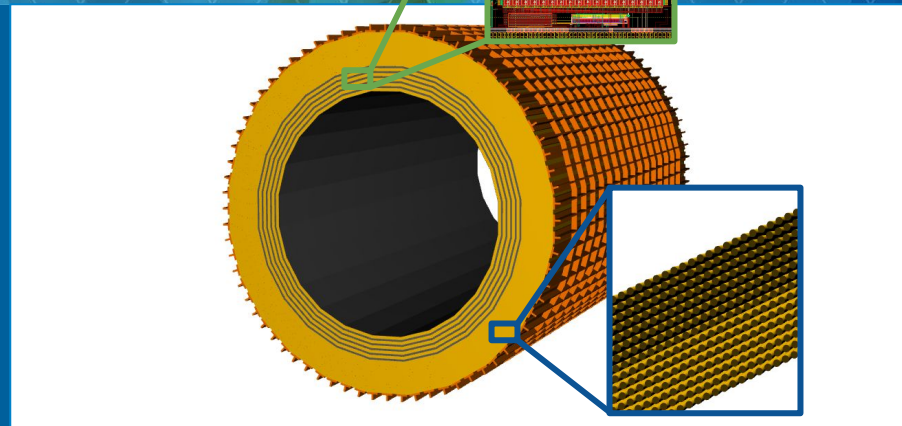


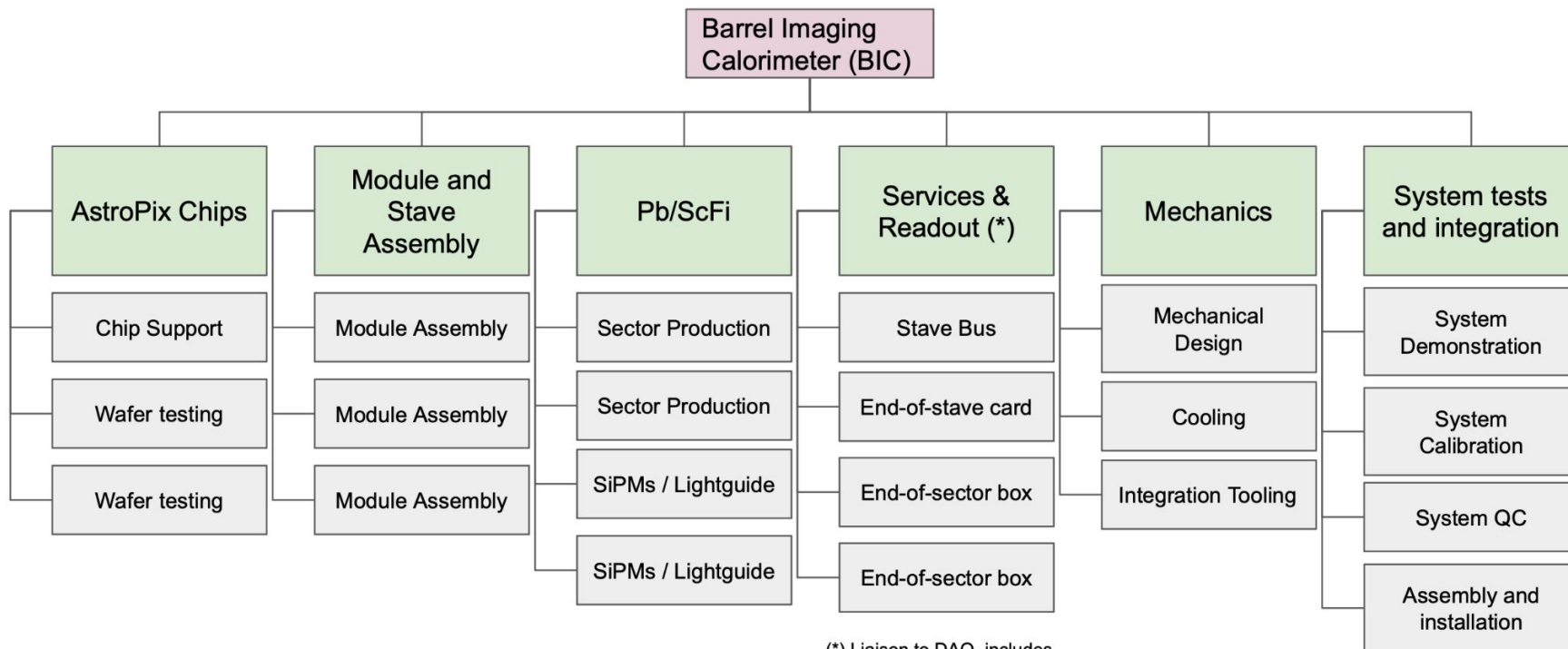
Barrel Imaging Calorimeter Meeting,
September 12, 2023

Barrel Imaging Calorimeter (BIC) Updates



Sylvester Joosten
PHY, Argonne National Laboratory

Draft ORG-chart for discussion



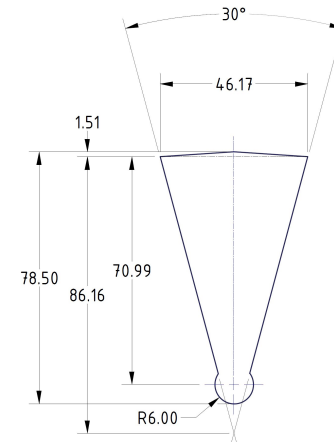
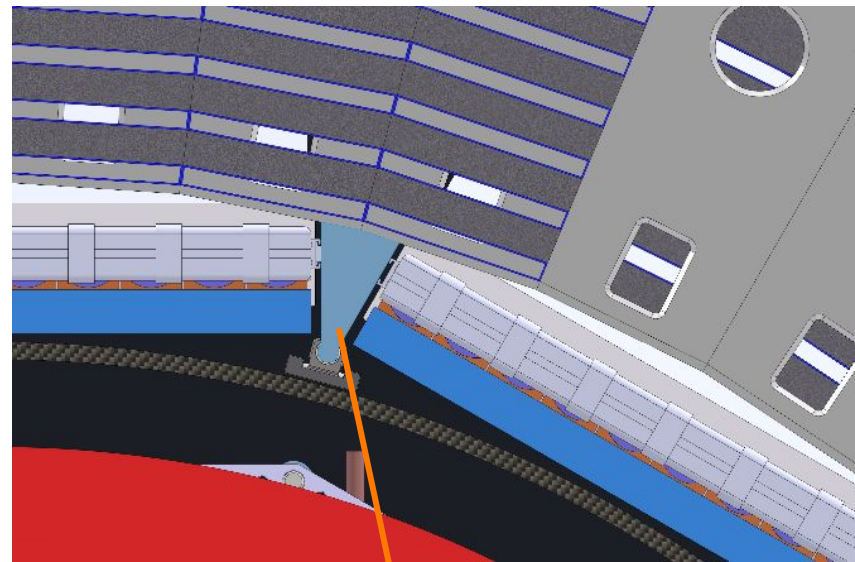
(*) Liaison to DAQ, includes readout electronics and slow controls

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>	Argonne	0.25	CF fabrication
Scientist	Argonne	0.16	Oversight
<NASA Engineers>	NASA	1	AstroPix end-of-stave card design
Electrical Engineering Team	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>	BNL	0	Integration

Engineering Updates

- Most likely 3 cm radial outward shift to accommodate inner detector
 - Still need to assess impact on hermetic coverage
- New integrated support structure attaches inner detector rails directly to our calorimeter
 - Pro:
 - No support frame needed: less material in front; minimize outward shift
 - Simpler structure at end of sectors
 - Cons:
 - Cannot have continuous inner layer for DIRC (but this may be fine)
 - Support rail seems beefy (but can be made hollow)



Collaboration Meeting

January 9-13, 2024 (Tue - Sat) - Argonne National Laboratory!

Advanced Photon Source Conference Center

DSC Meetings Planned as Parallel Sessions

Please plan for the BIC Meeting

