



BIC End-of-Sector Boxes

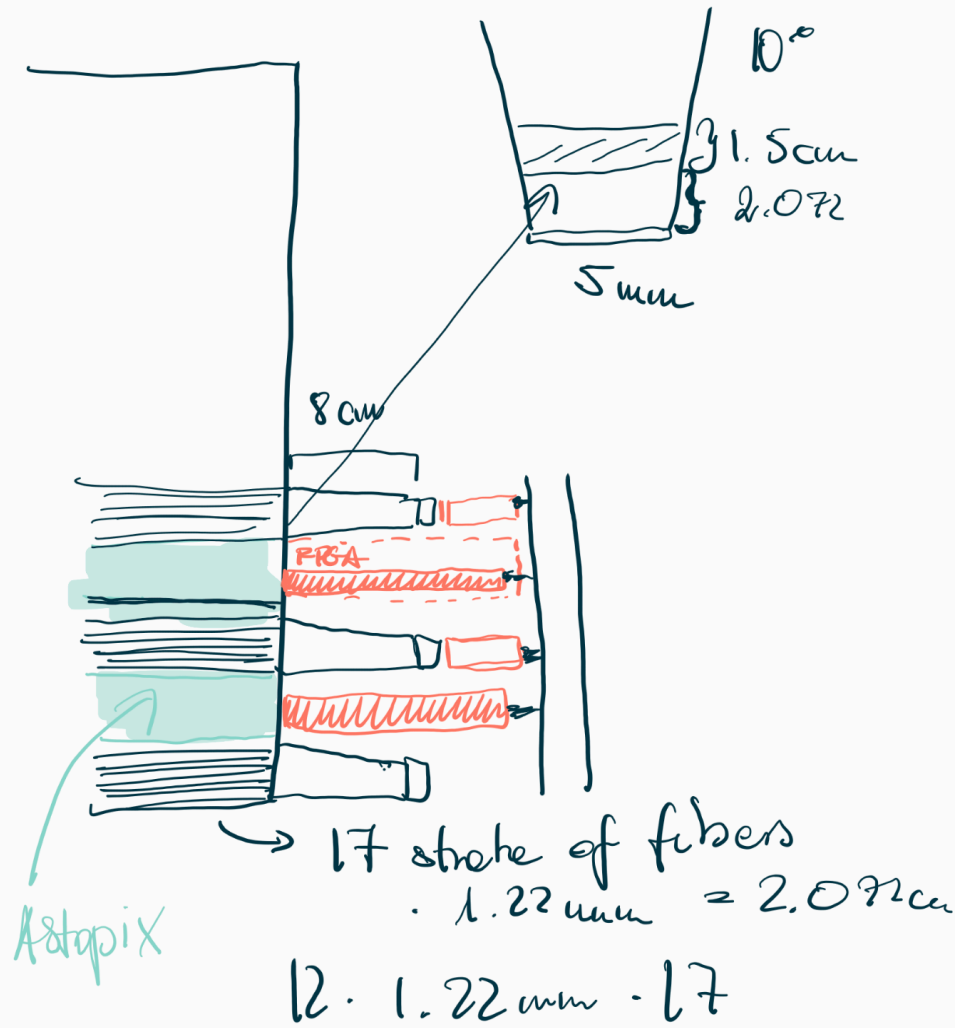
Z. Papandreou, M. Žurek

Barrel ECAL DSC, ePIC Collaboration Meeting, January 11, 2024

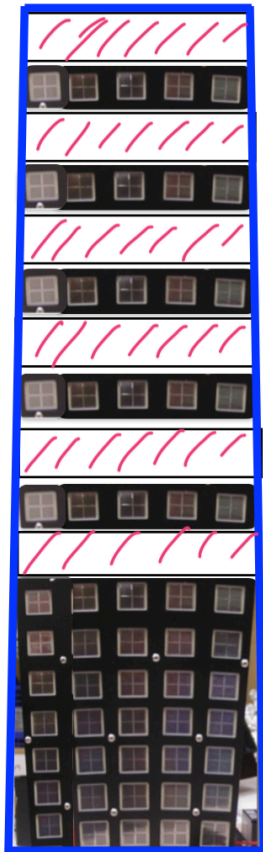


ESB: all encompassing

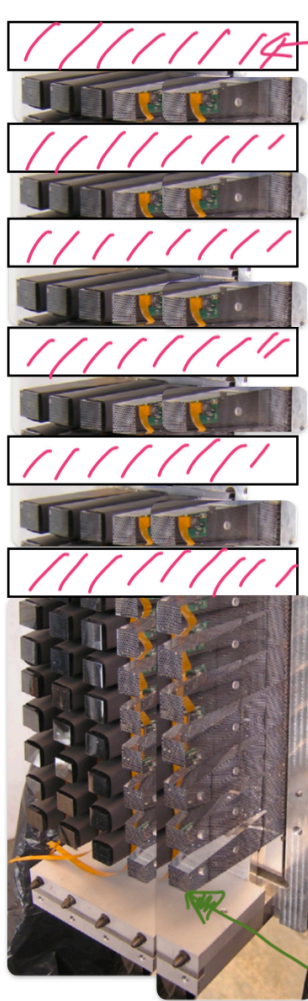
- **Contents:**
 - **Light guides: length; acrylic vs non-imaging**
 - **LED Monitoring System (LMS): GlueX-method**
 - **SiPMs**
 - **SiPM Electronics Boards**
 - **AstroPix**
 - **Cooling**
- **Canadian NSERC Major Research Support (MRS)**
 - **Mechanical and Electronics design/construction**
 - **Canada Foundation for Innovation Grant: fall 2024, results May 2025**
- **Korean efforts**



Cooling likely needed (water)



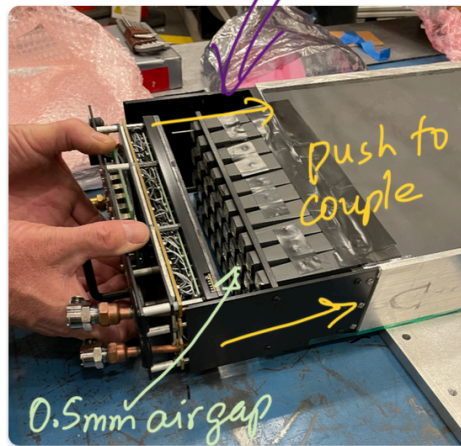
SiPMs & their windows



A sort of 3D view of light guides

AstroPix FPGA

GlueX End-of-Sector Box



The GlueX wedge; The BIC one is more complex with gaps for the Astropix

Si optical cookie/no air gap



Summary

- Discussion
 - Sector board design: 1 or 11?
 - AstroPix: feedthrough or dedicated space
 - LED on light guides like GlueX?
 - Cooling provision
 - Connectors