

# ePIC Backward RICH DSC formation

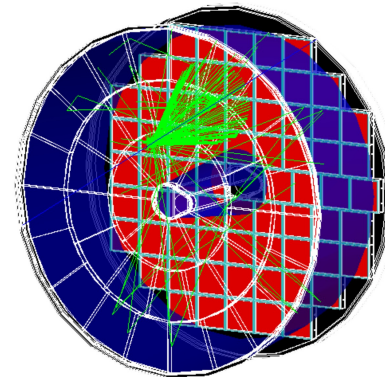
## ➤ Current status

- mRICH -> (pf)RICH transition
  - ePIC Collaboration decision is taken
  - The ball is now in the EIC project court
- A draft (C)DR is available
- A sufficiently detailed detector design exists
- A detailed P6-friendly costing sheet is composed
- A standalone modeling / reconstruction suite exists
- Consolidation of the participating institutions ~concluded:

- |              |                |               |
|--------------|----------------|---------------|
| ➤ Brookhaven | ➤ INFN Genova  | ➤ MSU         |
| ➤ Chiba      | ➤ INFN Trieste | ➤ Stony Brook |
| ➤ Duke       | ➤ JLAB         | ➤ Temple      |
| ➤ Glasgow    | ➤ Ljubljana    | ➤ Yale        |

- *Will maintain a welcoming & flexible environment, with*
  - (1) *a diverse institutional participation model for the next ~2 years*
  - (2) *a well-defined group of institutions committed to the construction phase*

A Proximity-Focusing RICH for the ePIC  
Experiment  
– Conceptual Design Report –  
(Draft 1.1)



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## ➤ Near future

- Proceed with a re-branding (new name, mailing list, Wiki page, etc)
- Discuss the organization and the institutional commitments
  - Adopt a concise charter-like document, etc
- Nominate a DSC Leader, a Deputy, (topical contact persons)
- Re-assess the available workforce
  
- Publish (C)DR as a JINST paper
- Prepare for the July 2023 ePIC PID subsystem review
- Come up with a Backward RICH proposal for the EIC Project R&D call
  
- Software
- RICH consortium

It seems a gradual change  
in the decision making process  
should be anticipated

## ➤ Between now and the end of 2024

- Participate in HRPPD-related activities (including a possible beam test in winter 2023 / 2024)
  - This one may include a first shot on aerogel
- Prepare a prototype beam test in May-June 2024
  - Aerogel, 2x2 HRPPD matrix, EICROC-like ASIC boards (?), HV/LV/cooling subsystems, etc
  - Establish basic performance:  $\pi/K$  and  $e/\pi$  separation, timing
- Finalize the design