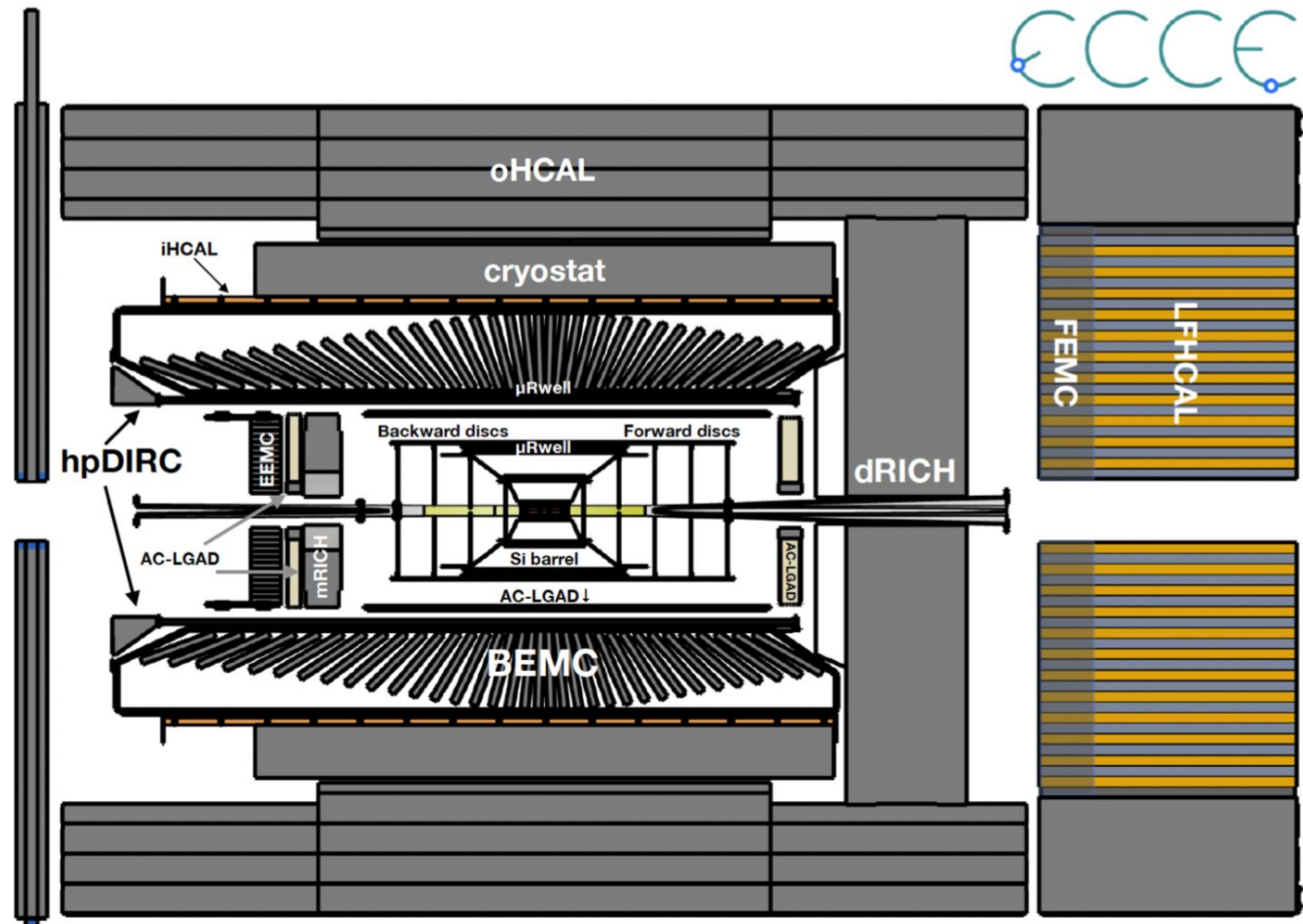


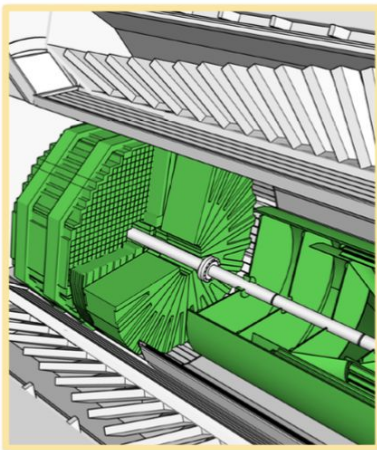
# Detector Team Update

6 December 2021





SketchUp drawings courtesy Tanja Horn, Walt Akers



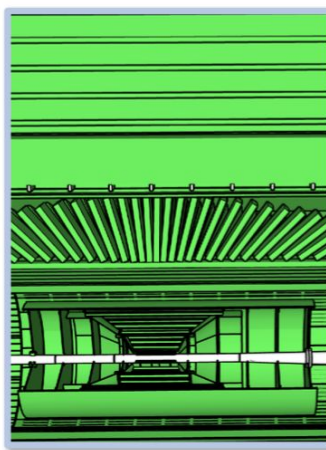
### Backward Endcap

**Tracking:**

- ITS3 MAPS Si discs (x4)
- AC-LGAD

**PID:**

- mRICH
- AC-LGAD TOF
- PbWO<sub>4</sub> EM Calorimeter (EEMC)



### Barrel

**Tracking:**

- ITS3 MAPS Si (vertex x3; sagitta x2)
- $\mu$ RWell outer layer (x2)
- AC-LGAD (before hpDIRC)
- $\mu$ RWell (after hpDIRC)

**h-PID:**

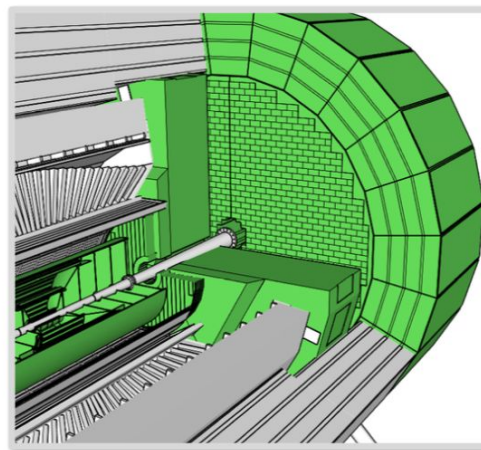
- AC-LGAD TOF
- hpDIRC

**Electron ID:**

- SciGlass EM Cal (BEMC)

**Hadron calorimetry:**

- Outer Fe/Sc Calorimeter (oHCAL)
- Instrumented frame (iHCAL)



### Forward Endcap

**Tracking:**

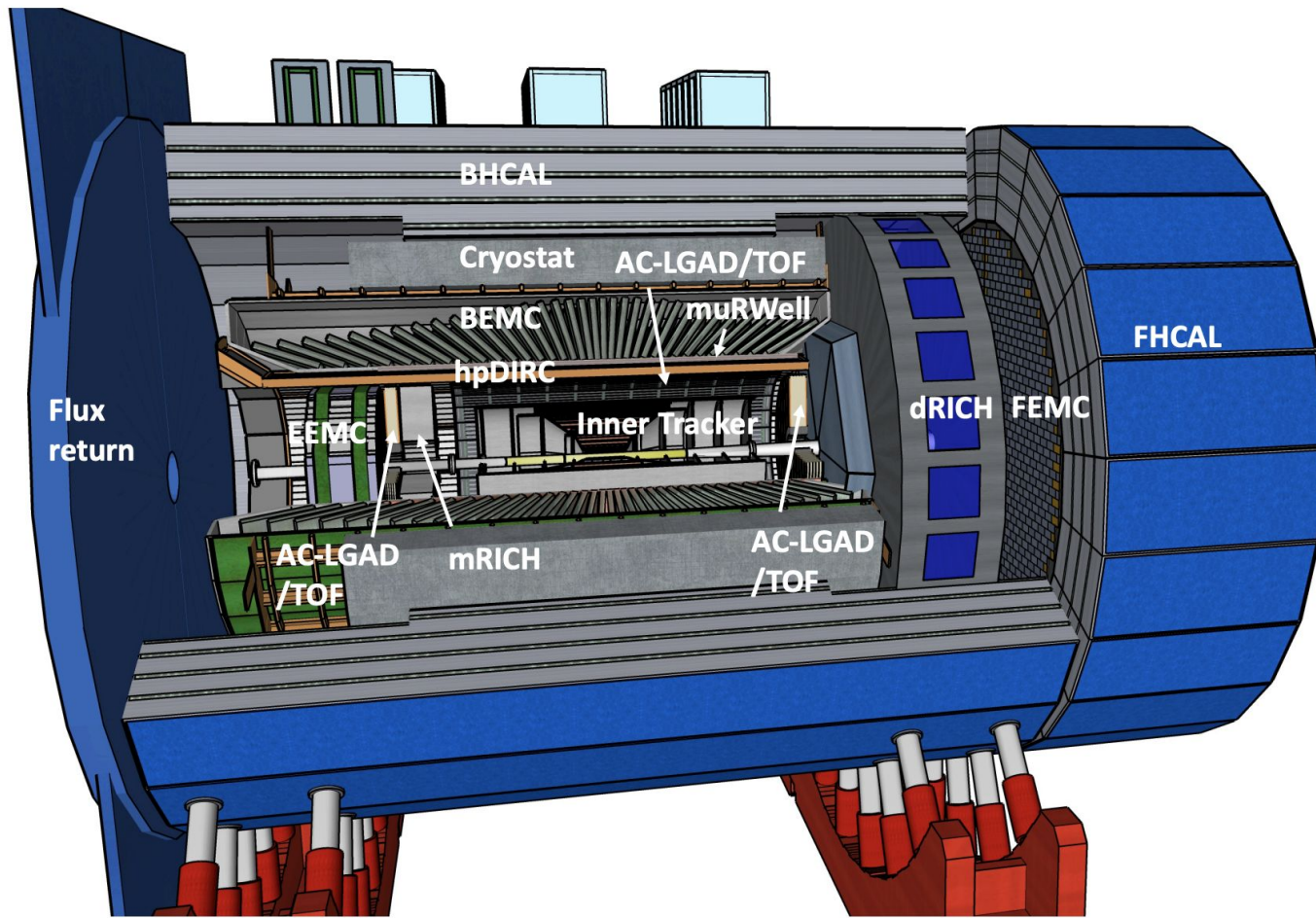
- ITS3 MAPS Si discs (x5)
- AC-LGAD

**PID:**

- dRICH
- AC-LGAD TOF

**Calorimetry:**

- Pb/ScFi shashlik (FEMC)
- Longitudinally separated hadronic calorimeter (LHFCAL)



# ECCE Detector Team Updates

- 10 Detector Technology Notes completed and posted on December 1. ✓
  - <https://www.ecce-eic.org/ecce-internal-notes>
- Cost & Schedule Note, 10 subsystem cost/schedule spreadsheets, and 18 supporting documents completed and posted on December 1. ✓
- Studies continue with publication of some notes/studies after January 21.
- Please, consider attending EIC Detector Proposal Advisory Panel Meeting on Dec. 13-15.
  - <https://www.bnl.gov/dpamodelmeeting/>
  - <https://indico.bnl.gov/event/13614/>
- Planning proceeds for 2022 generic EIC R&D (eRDnnn), EIC Silicon Consortium and ITS3 R&D, and testbeam studies. Many ECCE members/institutes are involved in these activities.
- New institutes are welcome to join ECCE and get involved.

# ECCE Detector Notes and Cost & Schedule Notes

## Detector Tech Notes:

- Magnet
- Calorimetry
- Tracking
- PID
- Readout/DAQ
- Far forward/Far backward
- Detector infrastructure
- Computing plan
- Software & Simulation
- AI Assisted Design

## Cost and Schedule

- Cost and Schedule Note
- Project Cost/Schedule Sheets
- WBS Details:
  - Cost Summary at L4
  - Cost Summary at L5
  - Detailed Costing
  - Cost Estimate
  - Basis of Estimate by WBS
  - Reuse Summary
  - In-Kind Summary
  - Labor Summary
  - Materials Summary
  - Det. Mgmt. WBS
- Schedule Details:
  - Detailed Schedule
  - Schedule Summary
- WBS Dictionary
- Basis of Planning
- Assumptions Log
- Executive Narratives
- Basis of Estimate
- Risk and Opportunities Log

# THANK YOU!

- Thank you to all our Detector Working Group co-conveners and participants for leading and contributing to the many months of DWG meetings and cost meetings.
- Next, an EEMC electromagnetic calorimetry performance study presented by Nicolas Schmidt (ORNL).