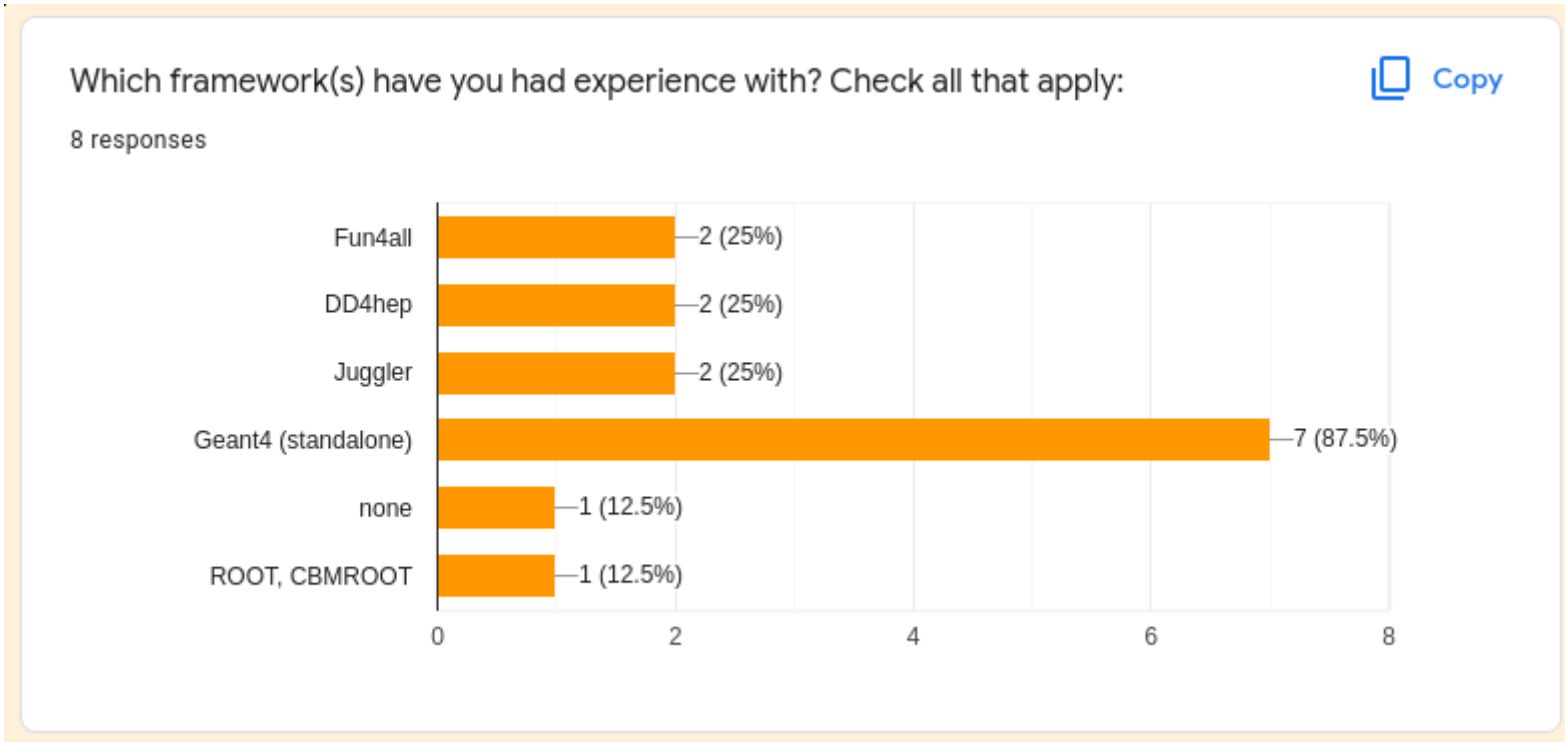


Survey Results (so far)

Survey Results



Survey Results

Which frameworks or software stacks do you prefer, and why? Are there any frameworks or stacks that you do not prefer, and why?

Preferences of Software

2 responses Geant4 stated is preferred

General sense of openness to full simulation stacks

Preferred Attributes

Not complicated, light weight

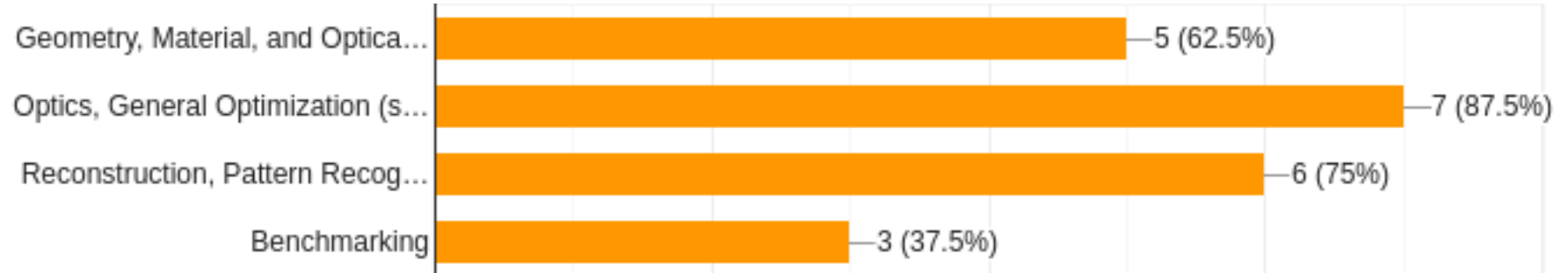
Good documentation

Open for future developments

Integrated with well known tools

Survey Results

What aspect(s) of the dRICH are you most interested in working on? Check all that apply:



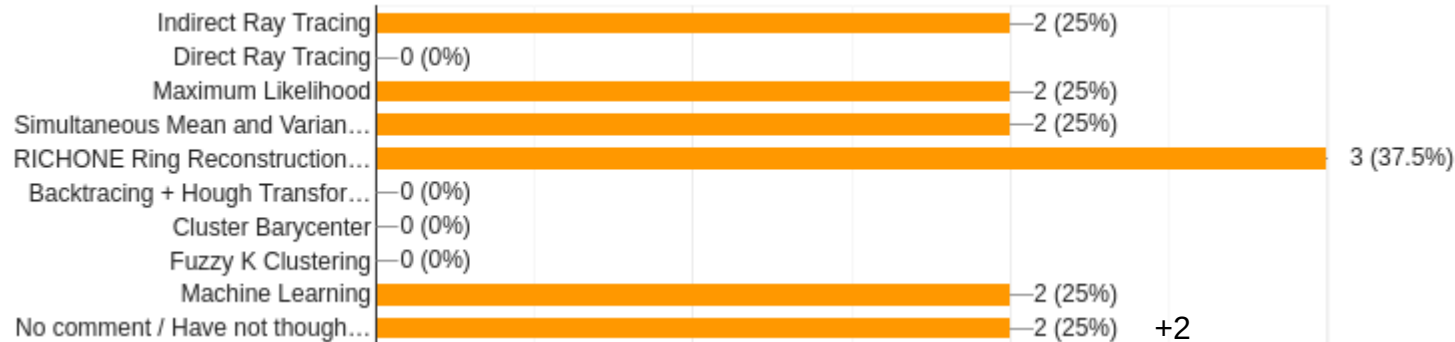
Other: Consultancy, Photon detectors (2)

Provide details of your interest:

Gain idea of who wants to work on what

Survey Results

What are your preferred reconstruction/PID algorithm(s), or what do you think is/are the best suited for the dRICH? We realize that some of these options have overlap, are used together, or are specified for certain experiments, but we want to gauge interest and feedback for applications to the dRICH. The next question allows you to provide comments.



Survey Results

Details of your choice of reconstruction/PID algorithm(s):

Comments / Preferences / Details

- Start with pattern recognition
- Machine learning is useful to find signal in high-rate + high background
- Use implemented IRT algorithm to compare to others
- Prefer intuitive algorithm → cross check with first principles

Survey Results

Are there any other tasks that you would like to see progress on, but may not have time or energy to work on yourself?

Responses beyond the survey:

- Realistic simulation of noise / time information
- Aerogel tiles non-homogeneity
- Mechanical design of the detector

Any other comments, suggestions, ideas?

No comments

People Power

Full simulation support / guidance

- Support efforts in full simulation stacks
 - Keep DD4hep & F4A synced
 - optical property tables
 - quantum efficiency
 - ...
 - Provide implementation guidance
- Fun4all: Jin, Sebastian
 - DD4hep / Juggler: Chandra, Chris, Alexander
 - Standalone: ?

Algorithms

- Anyone can work on any – try to keep framework independence
 - IRT
 - Framework independent, and connected to DD4hep and Juggler
 - Need to re-do IRT ↔ geometry connection for the updated dRICH
 - Other algorithms can be cross checked
- Chandra, Chris

Geometry / Materials

- Interest in sensor development → help with accurate design in simulation
 - Optics tuning
 - Dual mirrors
- NISER

Please fill out the survey or speak up if you want to work on something!

Outlook

■ Tutorials

- DD4hep
 - Follow general tutorials (https://eic.phy.anl.gov/tutorials/eic_tutorial/getting-started/quickstart/)
 - Use new ECCE repository, instead of ATHENA
 - updated dRICH geometry not yet merged (see MR)
 - Wrapper + dRICH specific scripts and documentation at <https://github.com/c-dilks/drich-dev>
 - Update in progress, see branch 'ecce-init'
 - Chris: write up a “Getting Started” guide
- Fun4all
 - Schedule for next meeting, or provide similar “Getting started” document ?

■ Next meeting: June 8th