HSF Reconstruction and Software Triggers Update

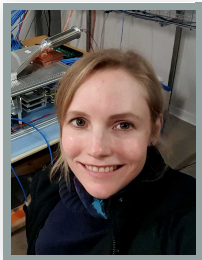## by Christina, Claire & Giulia

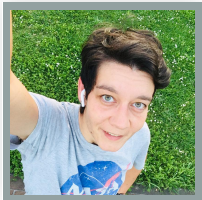HSF Coordination Meeting

30th March 2023

Convener's introduction
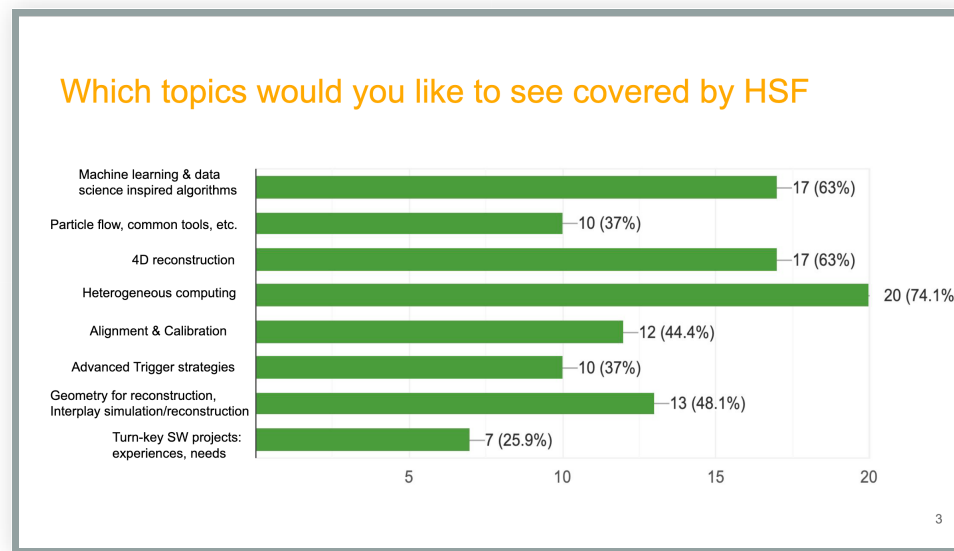

Christina Agapopoulou (CERN): LHCb @ LHC

Claire Antel (Uni Geneva): ATLAS&FASER @ LHC

Giulia Casarosa (Uni Pisa): Belle II @ SuperKEKB

Former activities: 2021 Survey

Former WG conveners conducted survey on what interests people most:

4D reco, ML, Heteregenous Computing hottest topics - probably also still today.

Former activities: Meeting topics 2021/22

Tracking has been well covered over the years - with good reason, given the challenges in tracking.

- 4D tracking (variety of experiments)
- Accelerated tracking (joint with CAF)
- Tracks with GNN, RICH PID

New topic ideas (Part I)

Are keeping survey results in mind, but also brainstormed additional topics for drawing in community:

- Open data initiatives: Open data for reco studies (open thread by former conveners)
- Biased triggering and missed physics:
    - Experiment TDAQ design and trigger/reco biases
    - Strategies to "leave no stone unturned"

New topic ideas (Part II)

- Sustainability: Impact, indicators, better practices
- Focus on small/medium-sized experiments, e.g. Common DAQ/software frameworks.
- "Lessons learned" from new/upgraded experiments after 1-2 years of data-taking

Next steps: Kick-off Meeting

- When? Tentative 26/04 at 2 pm CET (1 hour long).
- To advertise WG & kick-off meeting in targeted experiment & own-institution mailing lists.
- Introduction: Overview of importance of WG
    - Highlight differences & commonalities among experiments
    - WG as place where to discuss issues that someone else may have already solved
- List of plans - old survey & new ideas
- Open the floor to proposals from participants
    - Make google-doc available in advance