

# Linear Collider Software

## Meeting Close Out

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# common simulation

- general consensus to work towards a common simulation application
- build on the ongoing work for detector description and geometry (AIDA WP2)
- setup a working group to work towards that goal
- should start quite soon
  - this summer when DBD software work reduces
- define a geometry API for reconstruction, e.g. Gear

# PFA

- need to work on SDHcal and DHcal reconstruction
- develop clustering algorithms in pandora

# LCIO

- no immediate action items identified
- Wizard will provide LCIO MCParticle files in the future

# Common production

- no immediate action items identified
- already very good collaboration and splitting of the work load by Generator group and SCTG
- analysis groups need to make requests for number of (bg) events they need
  - backed up by 4-vector (fastsim) study

# Tracking

- general consensus to work towards a common track reconstruction package in C++
- in context of AIDA WP2
- implementation of FTF and TRF like algorithms for Si-Tracking

# LCFIPlus

- lots of progress with vertexing and flavor tagging
- some minor issues to be addressed
- e.g. singleton pattern for data model, documentation

# Common DST Format

- reached on consensus on collections:
  - MCParticles: **One** collection. Any particle that leaves a hit
  - Tracks and Clusters: **One** collection. Needed for training of b-tagging
  - PFO collection: **One** by slicPandora. Iowa PFA?
  - Truth linking between rec – MC: Well documented
  - LCFIVertex objects: Primary and secondary vertices. Corresponding ReconstructedParticles.
  - ReconstructedVertexParticles: List of pointers to the particles belonging to a vertex + all PFO that are not daughters of the vertex particles