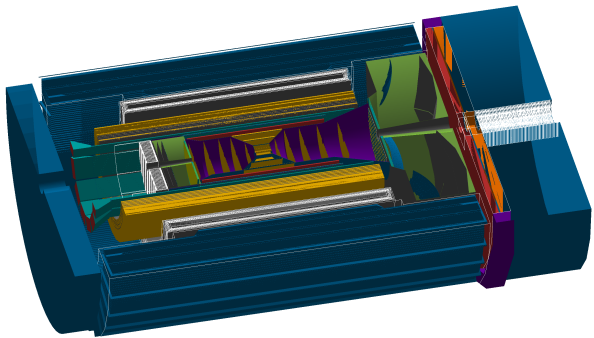
Secondary vertex finding with ACTS

- a quick overview -



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Initial vertex finder overview

https://github.com/eic/EICrecon/blob/secondaryvertexDevel/src/algorithms/tracking/SecondaryVertexFinder.cc

- Large suite of vertex finders available in ACTS (`AdaptiveGridDensityVertexFinder`, `AdaptiveMultiVertexFinder`, `FullBilloirVertexFitter`, `GridDensityVertexFinder`, `IterativeVertexFinder`, `TrackDensityVertexFinder`, `ZScanVertexFinder`
  → these algorithms are focused around primary vertex finding!
  → strong non-removable constraints implemented (e.g. vertex on beamline requirement)
- Created factory `SecondaryVertexFinder_factory`
  → underlying class is `eicrecon::SecondaryVertexFinder`
  → code in my branch linked above
- Planned feature: factory imports primary vertices from the `IterativeVertexFinder`
  → allows to place cuts on impact parameter from secondary vertex to primary vertex and more
- Factory uses `ActsExamples::Trajectories` as input, similar to primary vertex finder
  → iterates over all track pairs (currently without any constraints) and determines position of closest approach
  → uses `Acts::FullBilloirVertexFitter` for vertex fitting
- Vertex sample is saved as `CentralSecondaryTrackVertices` in EICrecon output

Initial test results

1. Simulated events with two tracks (π^+ and π^-) at fixed (4cm, 4cm, 0cm) position
   → allows to validate that code works
2. Future plan:
   → simulate events with multiple vertices at fixed locations
   → simulate full Pythia events
3. Reconstruction of fixed vertex position worked well
   → some outliers observed and to be investigated
4. Limitations of ACTS not yet fully understood for secondary vertex finding
   → switch to KFParticle implementation possible as alternative (only if really needed!)