

# Reconstruction Tasks: Shared Priorities with PWGs

**Electron Finder:** Developing an algorithm for identifying electrons and the scattered electron of the DIS process.

- **Overall status:** Successfully closed in April release [[report from General meeting](#)].

**Vertexing and PID:** Enhancing the vertexing and PID capabilities to study heavy flavor physics.

- **Overall status:** **Primary** vertexing integrated (EICrecon, EDM4eic). PID LUTs as interim solution for PID algorithms.
- **Goal for July campaign:** Close out task on primary vertexing and PID capabilities. **Status update in today's meeting.**

**Secondary Vertexing:** Enhancing the vertexing and PID capabilities to study heavy flavor physics.

- **Overall status:** New reconstruction task on secondary vertexing led by Nicolas Schmidt (ORNL).
- **Introduction in today's meeting.**

**Particle Flow:** Improving the jet reconstruction using particle flow information. Not a priority for (pre?)TDR.

- **Overall status on calorimeter reconstruction:** Good progress on TDR priorities [[report from CERN meeting](#)].
- **Updates for July campaign:** Tuning parameters for track-based cluster merging [[1406](#)].

**Low  $Q^2$ :** Integration of the low- $Q^2$  tagger for precise measurements of photo and vector mesons production.

- **Overall status:** Baseline implementation available, integrated ML model in EICrecon using TMVA.
- Need to discuss the remaining tasks before closing out reconstruction task.