

ECL: recent activity

B. Oberhof
LNF-INFN, Italy

Italian ECL Meeting

10th November 2017



Pure Csl

- The full refactored (i.e. > release-00-07-00) reconstruction chain for pure Csl has been developed and will be in release-00-01-00
- The changes involve many modules hence I suggest to update full ecl package, no changes were made to the digitizer
- An example scripts to run a simulation and dump pure Csl info is provided: `ecl/examples/EclPureCsl.py`
- No optimization has been done for the clustering algorithm for pure Csl, pure Csl clusters are produced in 2 types (hyp. 5 and 6) in exactly the same way as Csl(TI)
- Pure Csl clustering seems to privilege larger clusters and is in general more robust against the choice of the algorithm
- Some results about performance shown at last B2GM:

<https://kds.kek.jp/indico/event/25459/session/17/contribution/316/material/slides/0.pdf>

Other activities and outlook

- Pure Csl: for the time being no further development is foreseen @LNF
- Ongoing ECL SW activities @LNF:
 - EclSplitterN2: delayed because of other priorities for release-00-01-00, logic already agreed on, based on best resolution on KL direction, needs some final work to be committed
 - Use of PSD (Pulse Shape Discrimination) information in clustering for neutral hadron ID is the next topic on the list
- Not strictly ECL, but related -> K_L0 list, joined effort:
 - ECL reconstruction: **PSD** (S. Longo), **eclSplitterN2** (B.O.)
 - ECL+KLM **likelihoods** (J.F. Krohn)
 - Analysis: construction **new K_L0 particle list** and testing (B.O.)
- Lately some fixes in validation scripts because of repeated failures
-> will be taken over by Elisa