

Status of new Decoder software
in Aliroot for RCU/Altro
formatted data.

Issues raised at previous meetings.

- There was a need for a faster decoder.
 - It was seen in particular in the HLT when raw data is decoded directly from memory, for PHOS ~72% of the total CPU time was spent for decoding the data.
 - Perhaps not so critical for offline because the IO operation of getting the data from disk is already quite expensive.
-

Progress since last time

- A new decoder was developed. It was tested and accepted by the ALICE offline team and included in the latest release of Aliroot.
 - Two new functions `NextChannel()` and `NextBunch()`, included in existing `AliAltroRawReader` class.
 - All root macros etc will work as before, but now one has the additional option of using a faster version of the decoder.
 - The new decoder has been used continuously for PHOS HLT Cosmic calibration for 2 months without any problems.
 - Performance:
 - 4-8 times faster when data is read from disk
 - ~15 times faster when data is read from memory (HLT).
-

To do

- ❑ Improve robustness against corrupted data.
 - ❑ Further testing with TPC data
 - ❑ Bug fixing of some minor bugs.
-