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IDEA TEST-BEAM MERGED NTUPLES

STATUS OF THE MERGING CODE

- ▶ In a previous meeting ([10th October](#)) I presented the detail of the DREAM-GEM merging code.
- ▶ The code produces synchronised ntuples with the information from both DAQ systems.
- ▶ The ADC counts of the DREAM DAQ are already associated to physical objects (*matching* procedure with 2018 config).
- ▶ Ideally, these ntuples should become the baseline input for all combined runs.

MERGED NTUPLES

- ▶ I produced merged ntuples for all the combined runs listed in the [twiki](#).
- ▶ Caveat: the [webpage](#) where Nicola is collecting the data is missing a few GEM files. Some of them were in the storage folder of the dreamtest computer, but (GEM) runs number 171, 172 and 173 are still missing.
- ▶ The merged files are in an eos folder:
`/eos/atlas/user/g/glerner/IDEA_TB_merged`
accessible by members of the idea-testbeam-analysis list.

MERGED NTUPLES – LIST AND NEW FEATURES

- ▶ Present list of merged files (to be moved to tier2 Bari?):

```
[glerner IDEA_TB_merged $ ls
merged_runDREAM_12508_runGEM_3.root  merged_runDREAM_12705_runGEM_66.root  merged_runDREAM_12807_runGEM_152.root  merged_runDREAM_12817_runGEM_169.root
merged_runDREAM_12686_runGEM_49.root  merged_runDREAM_12709_runGEM_71.root  merged_runDREAM_12808_runGEM_153.root  merged_runDREAM_12818_runGEM_170.root
merged_runDREAM_12688_runGEM_51.root  merged_runDREAM_12802_runGEM_145.root  merged_runDREAM_12810_runGEM_163.root  merged_runDREAM_12835_runGEM_178.root
merged_runDREAM_12690_runGEM_53.root  merged_runDREAM_12803_runGEM_146.root  merged_runDREAM_12813_runGEM_165.root  merged_runDREAM_12836_runGEM_179.root
merged_runDREAM_12703_runGEM_64.root  merged_runDREAM_12804_runGEM_147.root  merged_runDREAM_12815_runGEM_167.root
merged_runDREAM_12704_runGEM_65.root  merged_runDREAM_12805_runGEM_148.root  merged_runDREAM_12816_runGEM_168.root
```

- ▶ Reminder: each file includes DWC-GEM correlation histograms to prove the synchronisation of the two DAQs.
- ▶ These histograms are now split in four sub-set of events (1st, 2nd, 3rd and 4th 'quarter' of file) to make sure that the correlation is not spoiled towards the 'end' of the files.
- ▶ See the [10th October talk](#) for details on the file structure.