Performance of AMORE and DATE in HEP Lab A, FIT

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Characterization of 8 Triple GEMs with old version of amoreMTS

- run was to generate 64 plots (8 per Triple GEM detector).
  - Extreme stress of the amorePackage capabilites, 48 root 1D histograms with 16 2D histograms
  - Raw data: /mnt/raid/ThreeTargetsSept2011/ThreeTargetsAll.raw
  - 118K events after more than 3 days at a rate of ~ 0.45 Hz consistent during the whole run. The low rate is explained by the all the steps from decoding raw data to the zero suppression performed for each event to characterize 8 detectors
  - 95% of the user memory and 50% of the used swap memory

POCA reconstruction with new version of amoreMTS

- New amoreMTS package:
  - memory Leak fixed in MTSHistoManager.cxx:
  - Should process a larger number of events with less user memory consumption
  - Not tested yet with the 64 plots conditions
- run for POCA plots of the big cylinder lead cylinder scenario
  - currently running to produce nTuple with x,y,z, angle of POCA points
  - 28% of the user memory and 6% after 140K triggered events
  - Less than 2K poca points at a 5 degree lower cut on poca point angle
  - Missing hit issue back again !!!

Performance of DATE

- Running Big Lead Cylinder scenario
  - DATE crashes at about 300 K events when running both DATE and MORE on the same PC (first two aborted runs)
  - When only DATE is running (current run), more than 2.15M triggered events without crash (still running)
  - So the conclusion should be to avoid running AMORE on DATE PC
    - Not a memory leak issue but probably some underlying issue with running both software on the same machine
- More than 1.5M event saved in raw data file in many raw data files in /mnt/raid/bigLeadCylinderScenario/bigLeadCylinder#.raw