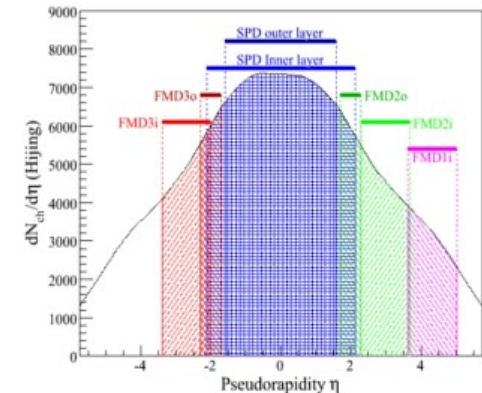




ALICE FMD offline update - offline week March 2009

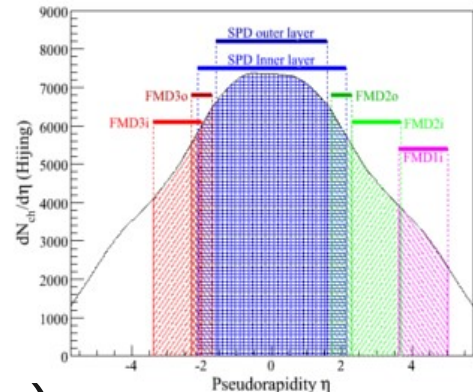
Hans Hjersing Dalsgaard,
Niels Bohr Institute,
University of Copenhagen

- Calibration
- Simulation
- Raw Data
- Reconstruction
- Quality Assurance
- Geometry





Calibration

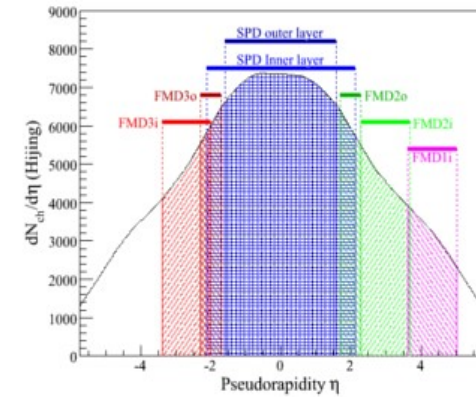


- Offline calibration done by detector algorithms (DAs).
- 3 FMD DAs: BaseDA, GainDA and PedestalDA.
- The FMD DAs are in AliRoot.
- The FMD preprocessor is also in AliRoot.
- DAs and preprocessor tested extensively in data taking during the LHC injection tests.
- Status: Done.



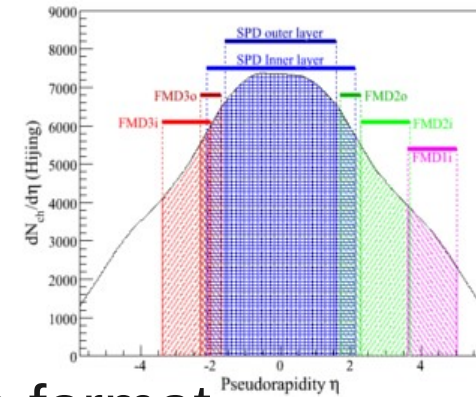
Simulation

- Simulation produces hits, digits and sdigits.
- Tested extensively through several productions.
- Event merging and embedding:
 - The last months I have been carried away in analysis but I will look into this ASAP.
- Status: Done (apart from merging and embedding).





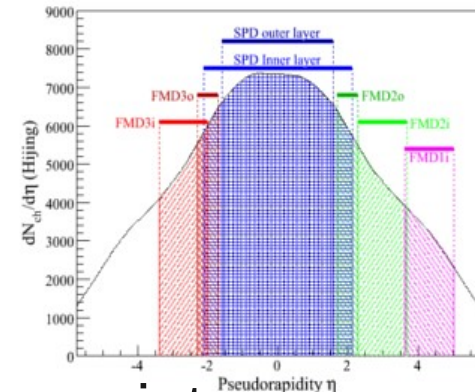
Raw Data



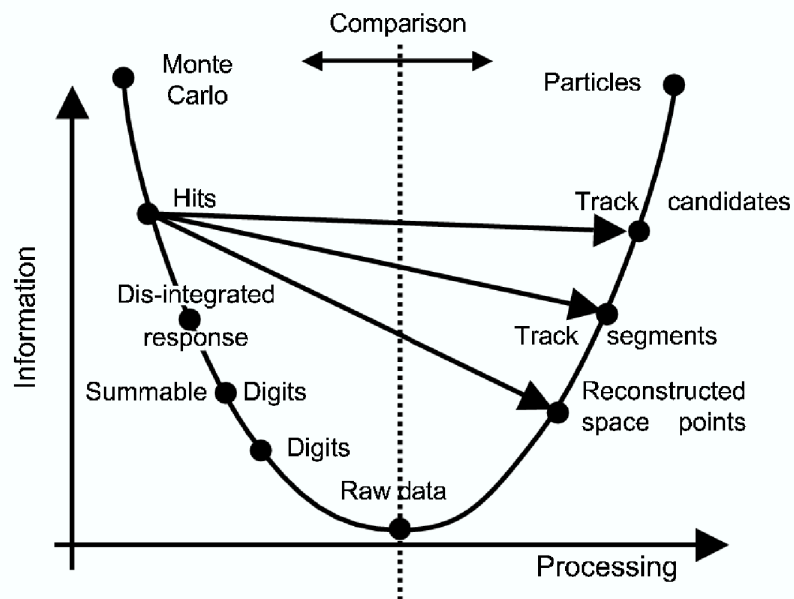
- Raw data format follows the ALTRO format, ie. the format decoded by Cvetans RAW code.
- FMD raw data tested extensively during data taking before the LHC incident and in productions.
- New RCU Firmware introduces new format. Decoder/Encoder (does this encoder exist for simulation ?) by Cvetan. New FW and decoder not tested yet.
- Status: Awaiting test



Reconstruction

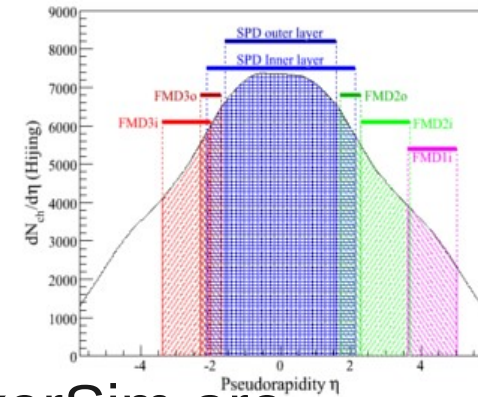


- FMD reconstructions produces digits (needed?), rec points (needed?) and ESD objects.
- Tested extensively in productions and with the data from the first run.
- Status: Done.





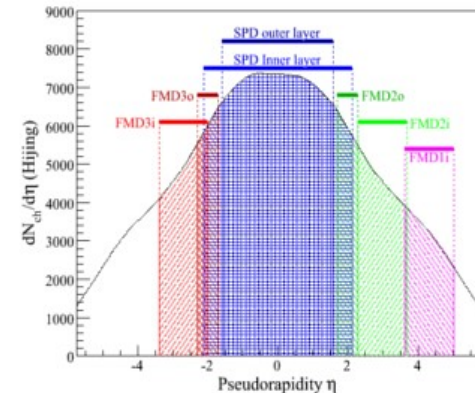
Quality Assurance



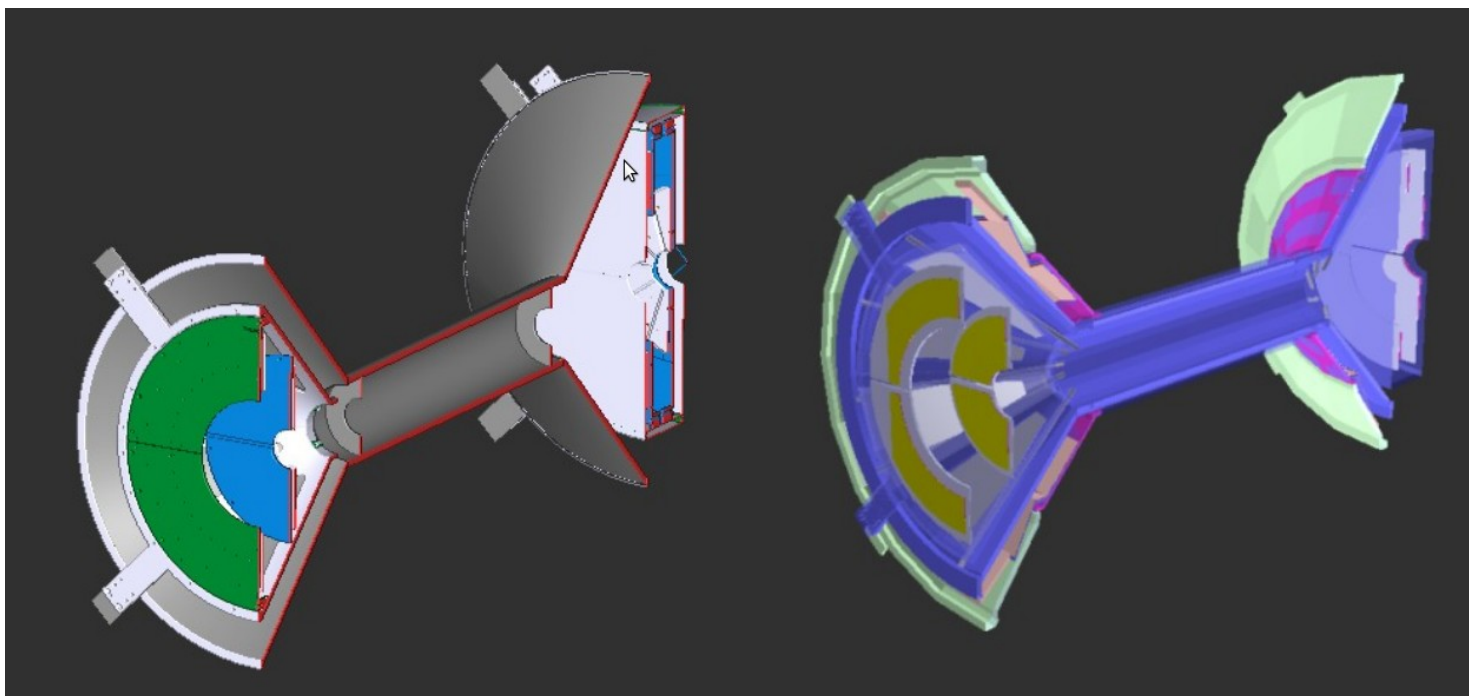
- AliFMDQADataMakerRec and AliFMDQADataMakerSim are implemented with corresponding reference data.
- When real data are available the reference distributions should be upgraded.
- If need arises we will upgrade accordingly.
- Status: Done (with room for improvement)



Geometry

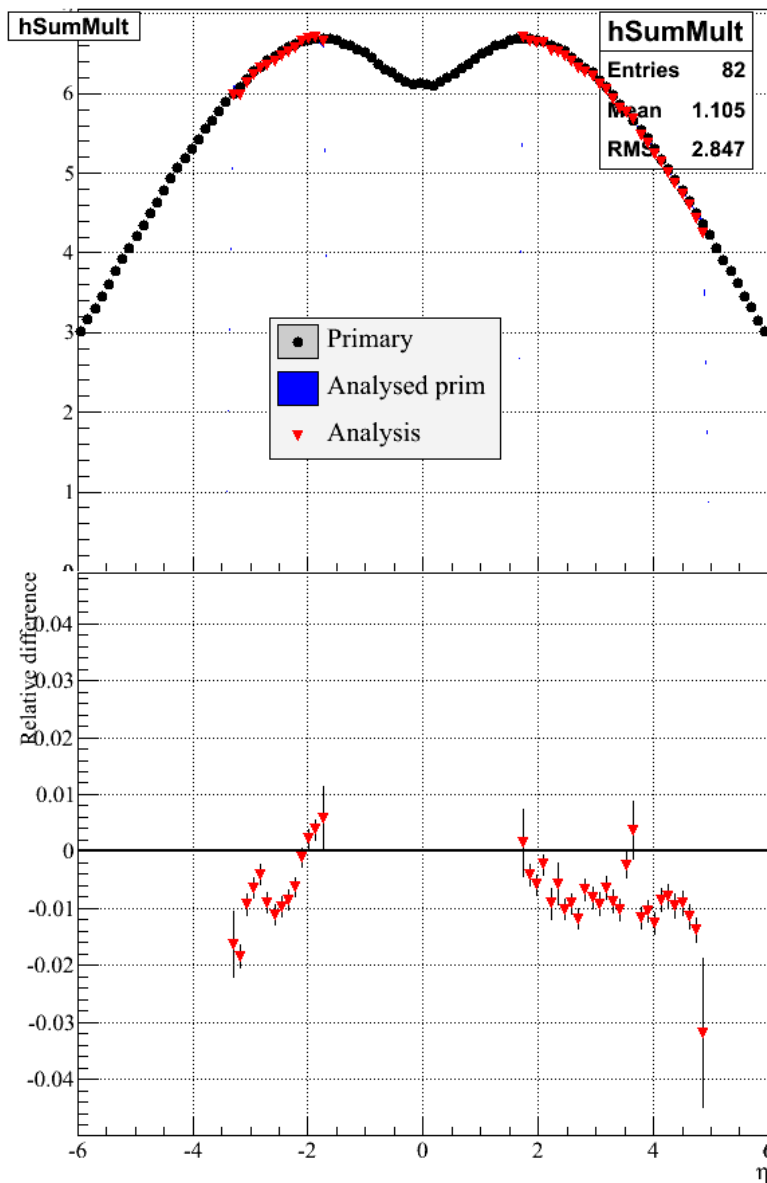
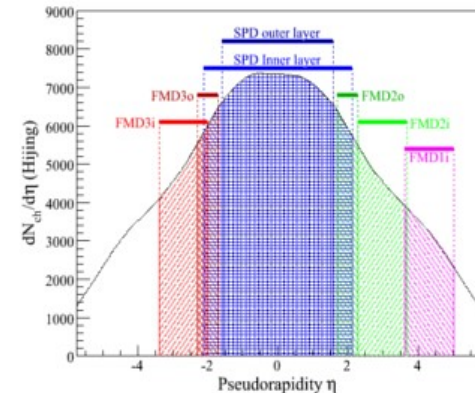


- All FMD-ITS overlap issues fixed.
- Issue was the too long ITS thermal screen. Fixed in fruitful collaboration with Mario Sitta.
- Status: Done.





A new focus : Analysis



- 600k p+p events
- Good agreement.
- We are close to getting on the train.



Conclusions

- Basically done with core stuff.
- The only outstanding issue is event merging and embedding.
- Focus now on analysis methods and corrections.
 - Includes methodical MC studies of background
 - Particle cuts
 - And similar.

