

# NAF Usage: ILC Case

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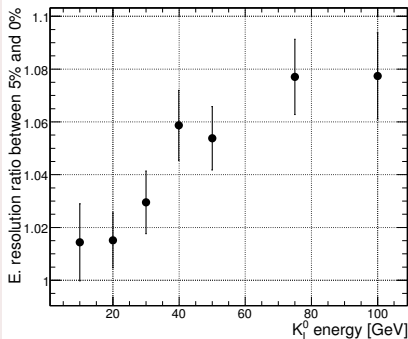
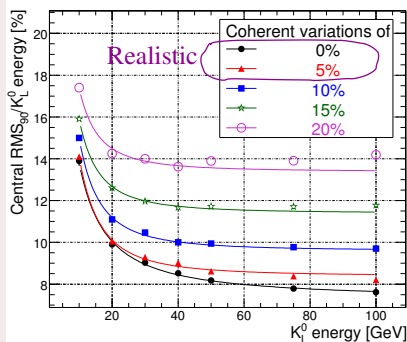
## NAF Usage: Why?

- Because you can
- Short learning curve (starting example of scripts using **Marlin** and **Mokka** are useful: get them from a colleague or from me)
- Continuous support from ILC software developers (i.e. ILC software on *afs.desy.de* available from NAF)
- The other alternative I know of: BIRD cluster (ok, but SL4/SL5 issues)
- Learn about `SGE_TASK_ID` (i.e. jobs arrays) and take off

```
980522 0.50008 piMinus-QG lucaci r 10/29/2009 13:32:22 48h.q@tcx07f.naf.desy.de 1 18
980522 0.50008 piMinus-QG lucaci r 10/29/2009 13:32:22 48h.q@tcx07f.naf.desy.de 1 90
980524 0.50008 piMinus-QG lucaci r 10/29/2009 13:34:27 48h.q@tcx07f.naf.desy.de 1 94
980525 0.50008 piMinus-QG lucaci r 10/29/2009 13:35:37 48h.q@tcx07f.naf.desy.de 1 71
980525 0.50007 piMinus-QG lucaci qw 10/29/2009 13:35:33 1 79-100:1
[lucaci@tcx042]/scratch/lustre-1.6/ilc/lucaci/TestBeam/gen/15GeV/piMinus-rectangle/QGSC_BIC% qstat -u lucaci | wc -l
481
```

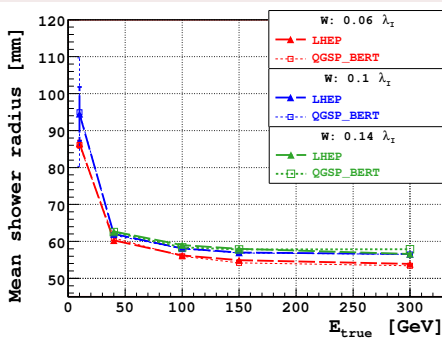
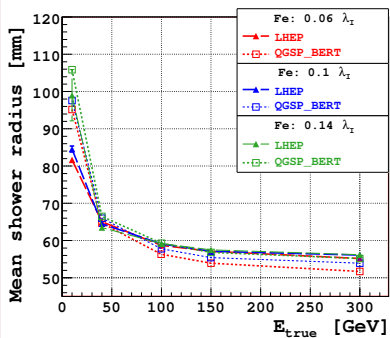
## NAF Usage: What for?

- ILD HCAL calibration studies as a response to IDAG questions (after ILD LOI)
- Mokka + Marlin + PandoraPFA
- Example: effect of coherent fluctuations (e.g. due to temperature) on energy resolutions in case of single particles



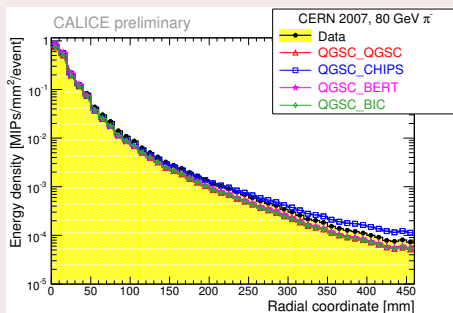
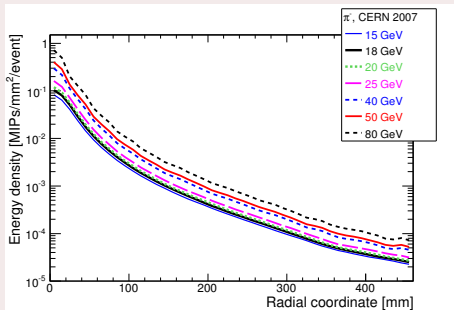
## NAF Usage: What for?

- Simulations of the CALICE HCAL: Fe vs W absorber, in view of the CLIC detector
- Mokka + Marlin + CALICE software
- Example: mean shower radius (Fe vs W, different absorber thicknesses, different Geant4 models)



# NAF Usage: What for?

- **Reconstruction of CALICE test beam data** (CALICE software available also on *afs.desy.de*)
- Marlin (ILC) + CALICE software
- Example: lateral profiles in CALICE tile HCAL
- **Generation, digitization and reconstruction of Monte Carlo files** for CALICE test beams
- Mokka (GEANT4) + Marlin + CALICE software



## My Personal Conclusions

- NAF is very user friendly  
(I gave up using GRID after 3 unsuccessful trials...)
- NAF works smoothly:
  - no problems with the transition from SL4 to SL5 (for both ILC and CALICE software)
  - most of the time free slots
- Thank you all NAF people for the great support