

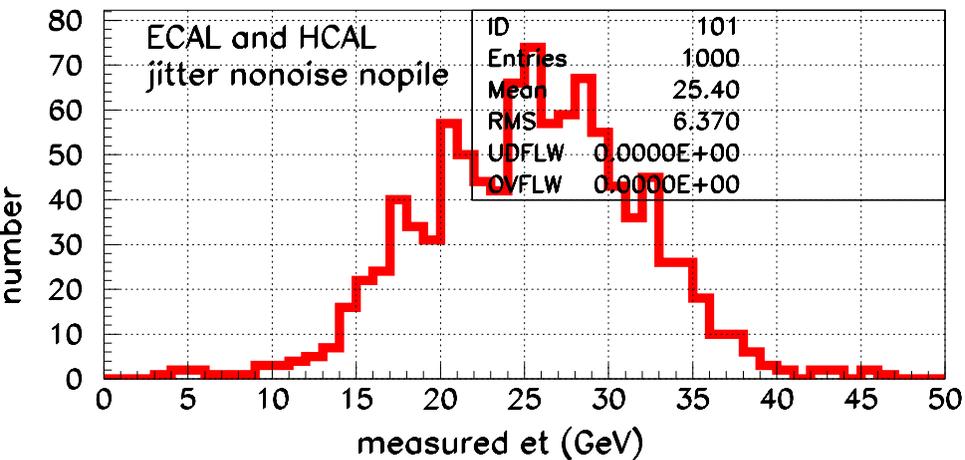
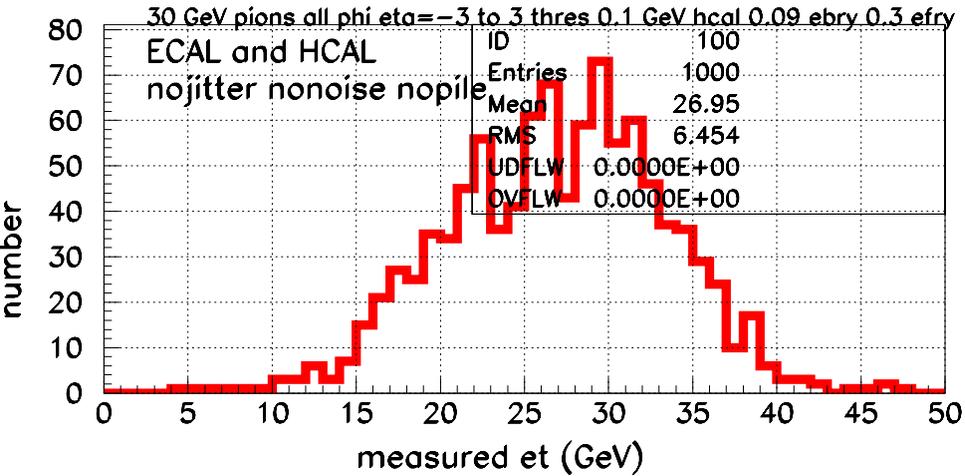
# more on jitter

Sarah Eno

# jitter

- 1) jitter = contribution to HCAL energy resolution due to the fact that the energy is not all deposited in the HCAL at the same time.
- 2) Hans-Peter warns that timing distribution of energy deposits from showers are only well-modeled by GCALOR. We used GHEISHA.

# 30 GeV Pions



mean/true

0.90

rms/sqrt( mean)

1.24

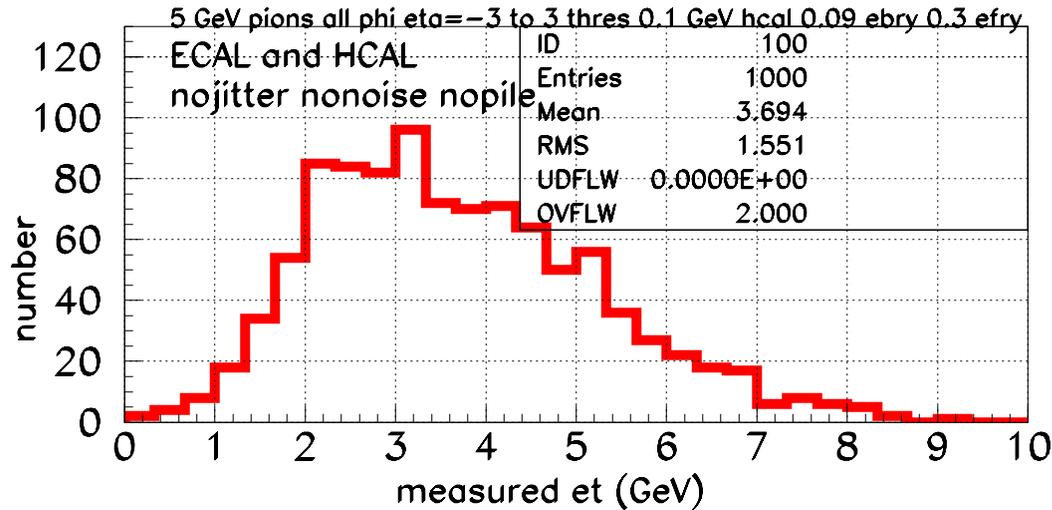
mean/true

0.85

rms/sqrt(mean)

1.26

# 5 GeV Pions

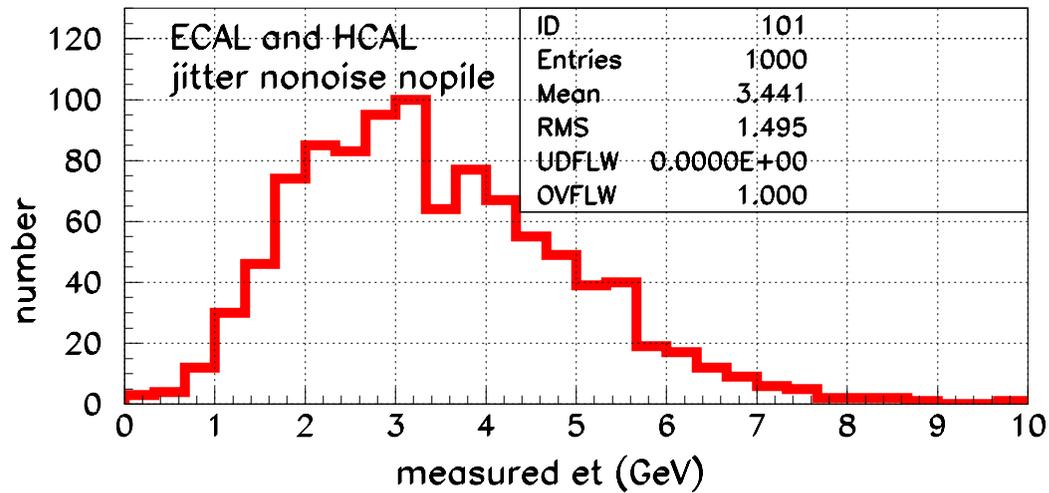


mean/true

0.74

rms/sqrt( mean)

0.81



mean/true

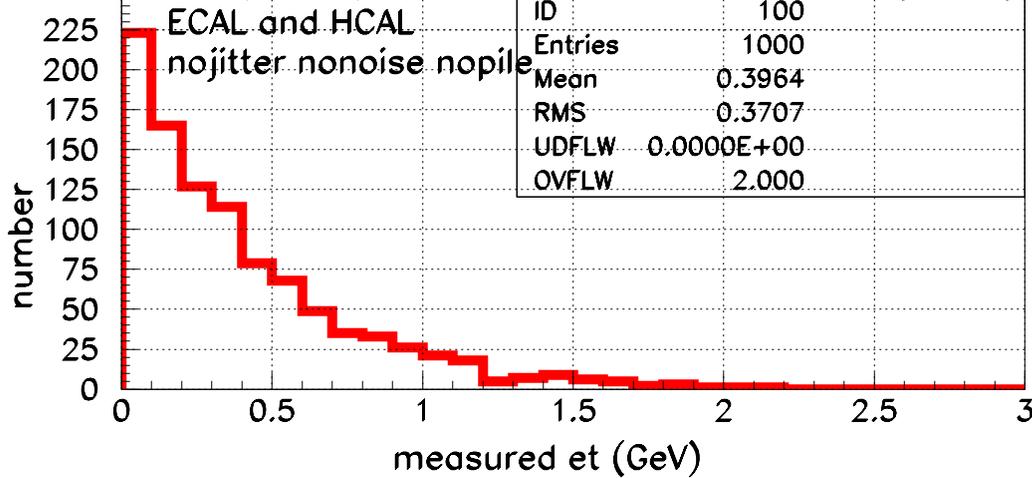
0.69

rms/sqrt(mean)

0.81

# 1 GeV Pions

1 GeV pions all phi eta=-3 to 3 thres 0.1 GeV hcal 0.09 ebry 0.3 efry

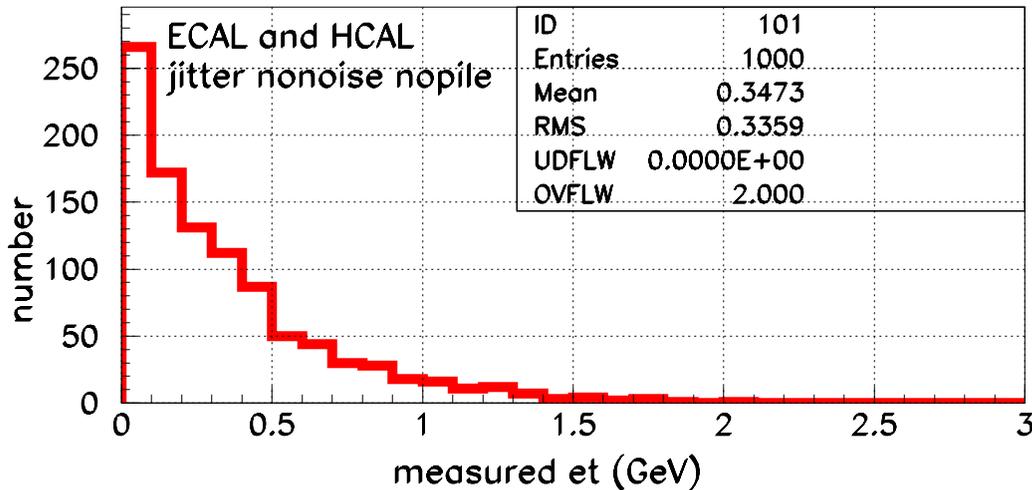


mean/true

0.40

rms/sqrt( mean)

0.59



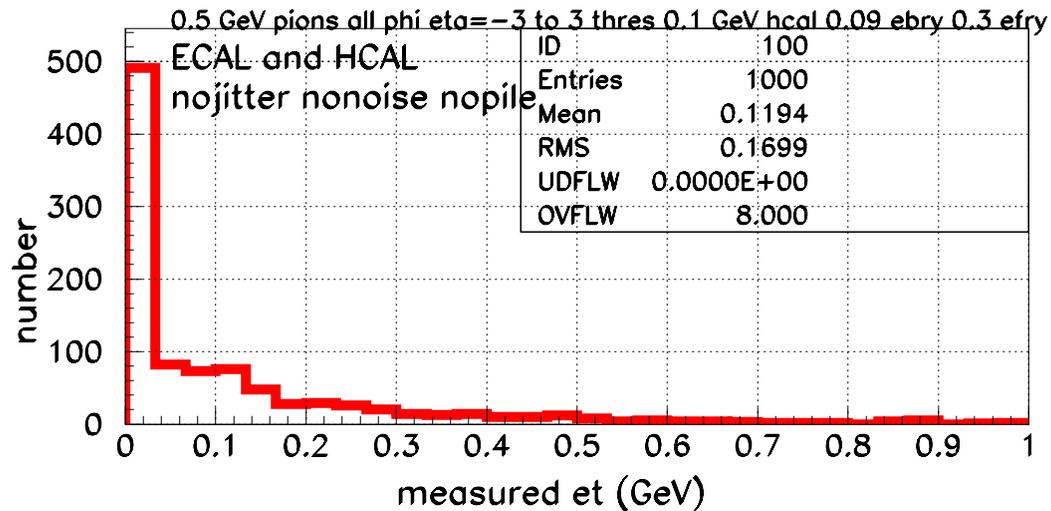
mean/true

0.35

rms/sqrt(mean)

0.57

# 0.5 GeV Pions

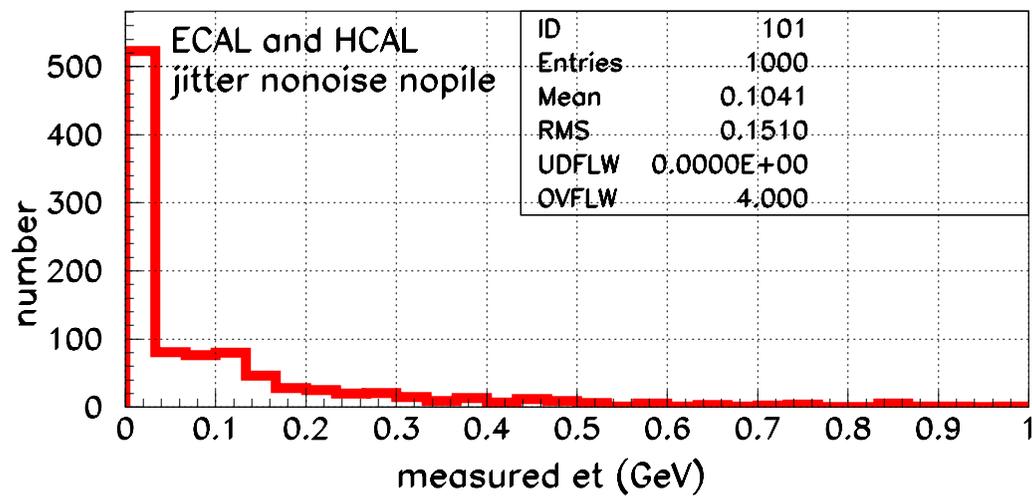


mean/true

0.24

rms/sqrt( mean)

0.49



mean/true

0.21

rms/sqrt(mean)

0.47

# Conclusion?

jitter does not really affect resolution. has a small effect on energy scale. can use “no-jitter” MC from November for June milestone?