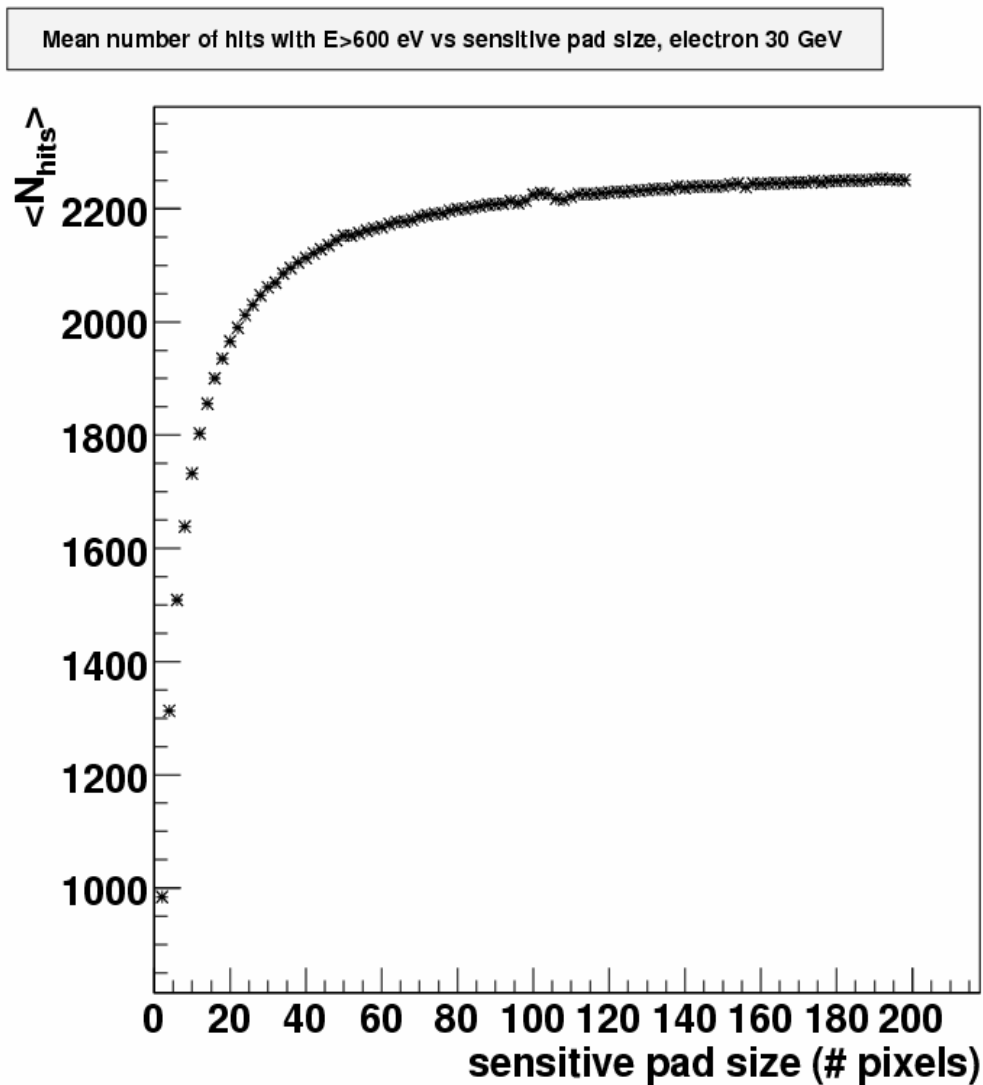# Update on digitisation procedure

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- Study of dead width
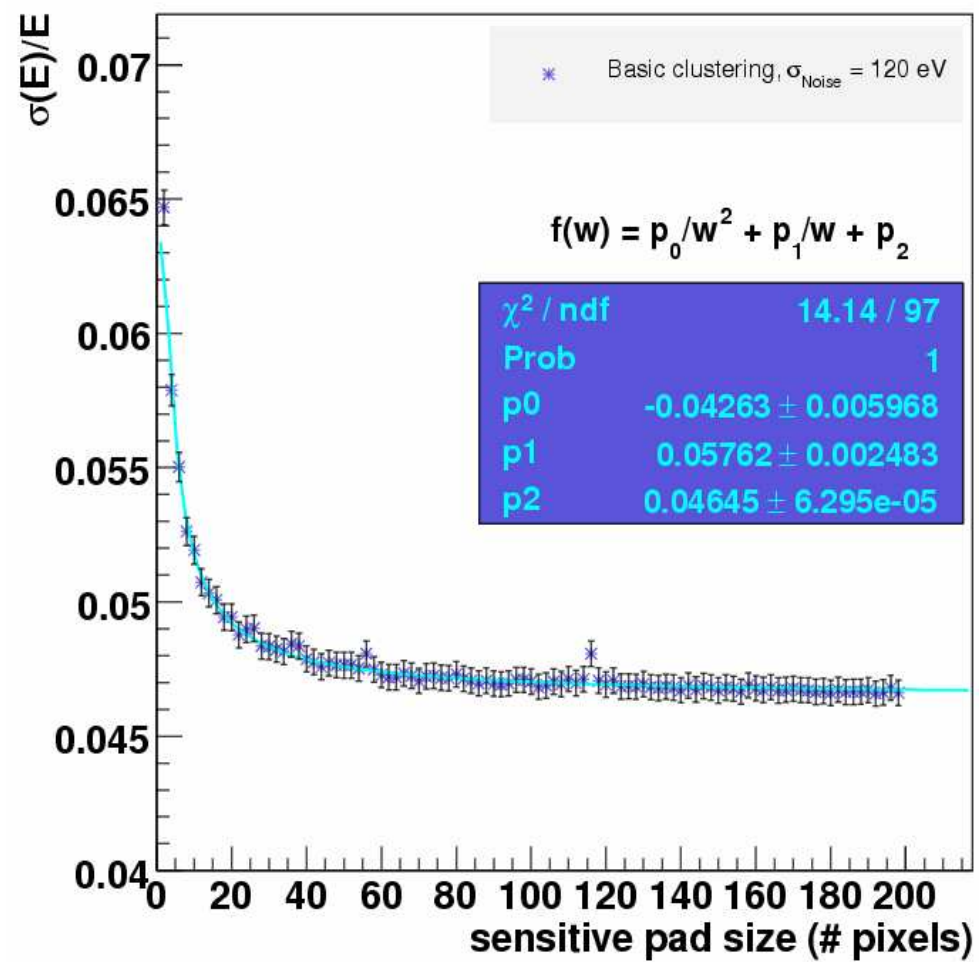- run on the GRID

Study of dead width

- Processor released in the Calice CVS rep.

- As last step of the digitisation procedure

- Just removing hits in strip of 4 pixels every N pixels, in x or y direction as choice.

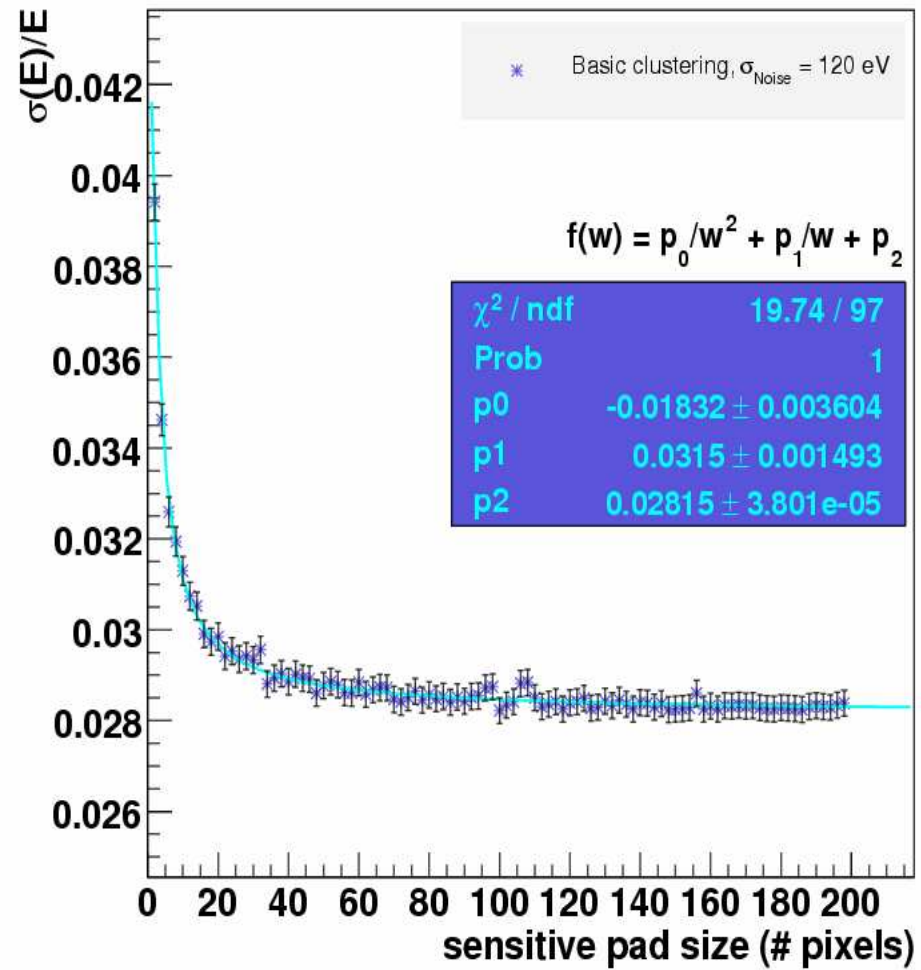- What is the minimal sensitive pad size acceptable ?

Mean number of hits with E>600 eV vs sensitive pad size, electron 30 GeV

Resolution obtained vs sensitive pad size

σ(E)/E vs sensitive pad size, electron 10 GeV

Basic clustering, σ_{Noise} = 120 eV

$$f(w) = p_0/w^2 + p_1/w + p_2$$

χ^2 / ndf	14.14 / 97
Prob	1
p0	-0.04263 ± 0.005968
p1	0.05762 ± 0.002483
p2	0.04645 ± 6.295e-05

σ(E)/E vs sensitive pad size, electron 30 GeV

Basic clustering, σ_{Noise} = 120 eV

$$f(w) = p_0/w^2 + p_1/w + p_2$$

χ^2 / ndf	19.74 / 97
Prob	1
p0	-0.01832 ± 0.003604
p1	0.0315 ± 0.001493
p2	0.02815 ± 3.801e-05

CALICE — Calorimeter for LC

σ(E)/E vs sensitive pad size, electron 20 GeV

Basic clustering, $\sigma_{Noise} = 120$ eV, E > 600 eV

$$f(w) = p_0/w^2 + p_1/w + p_2$$

χ^2 / ndf	18.22 / 97
Prob	1
p0	-0.0213 ± 0.004629
p1	0.03793 ± 0.001918
p2	$0.03486 \pm 4.894e\text{-}05$
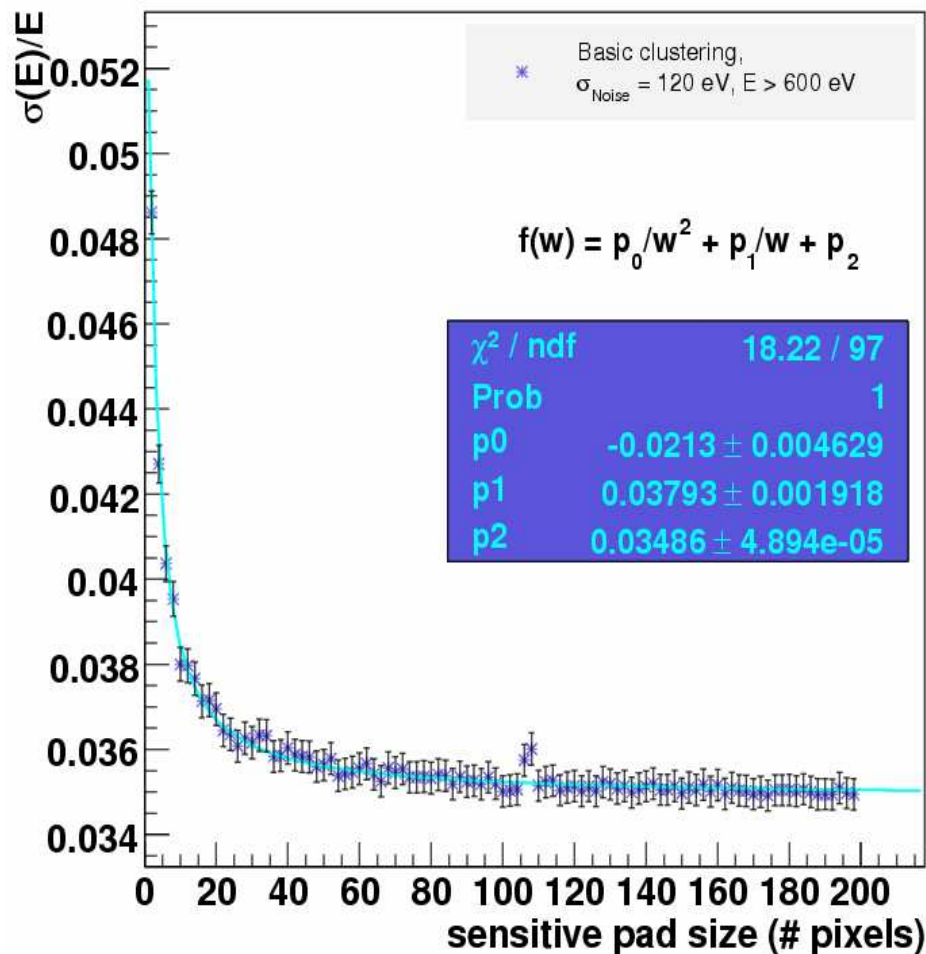
Asymptotical values

Energy	α
10 GeV	0.147
20 GeV	0.156
30 GeV	0.154

$\sigma(E)/E = 0.036$ Ł   α = 0.161
@ 20 GeV
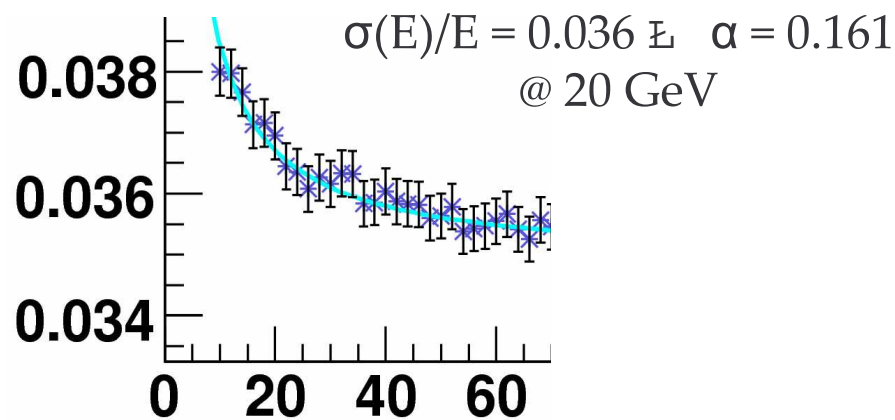
GRID working !!

- Thanks to Gidon from Imperial : Mokka is running on the grid !
- Have also send an analysis job : not digiMAPS, but coming soon !
- Currently setting up a web documention
- Please ask me whenever you're ready to try that, for MC production or analysis.
- The basis is : a statically-linked executable, the steer file, the input file (if not already on a grid Storage Element) and 2 perl scripts to send the job from a GRID machine:

  Ł really convenient and easy to use when the perl script are written.