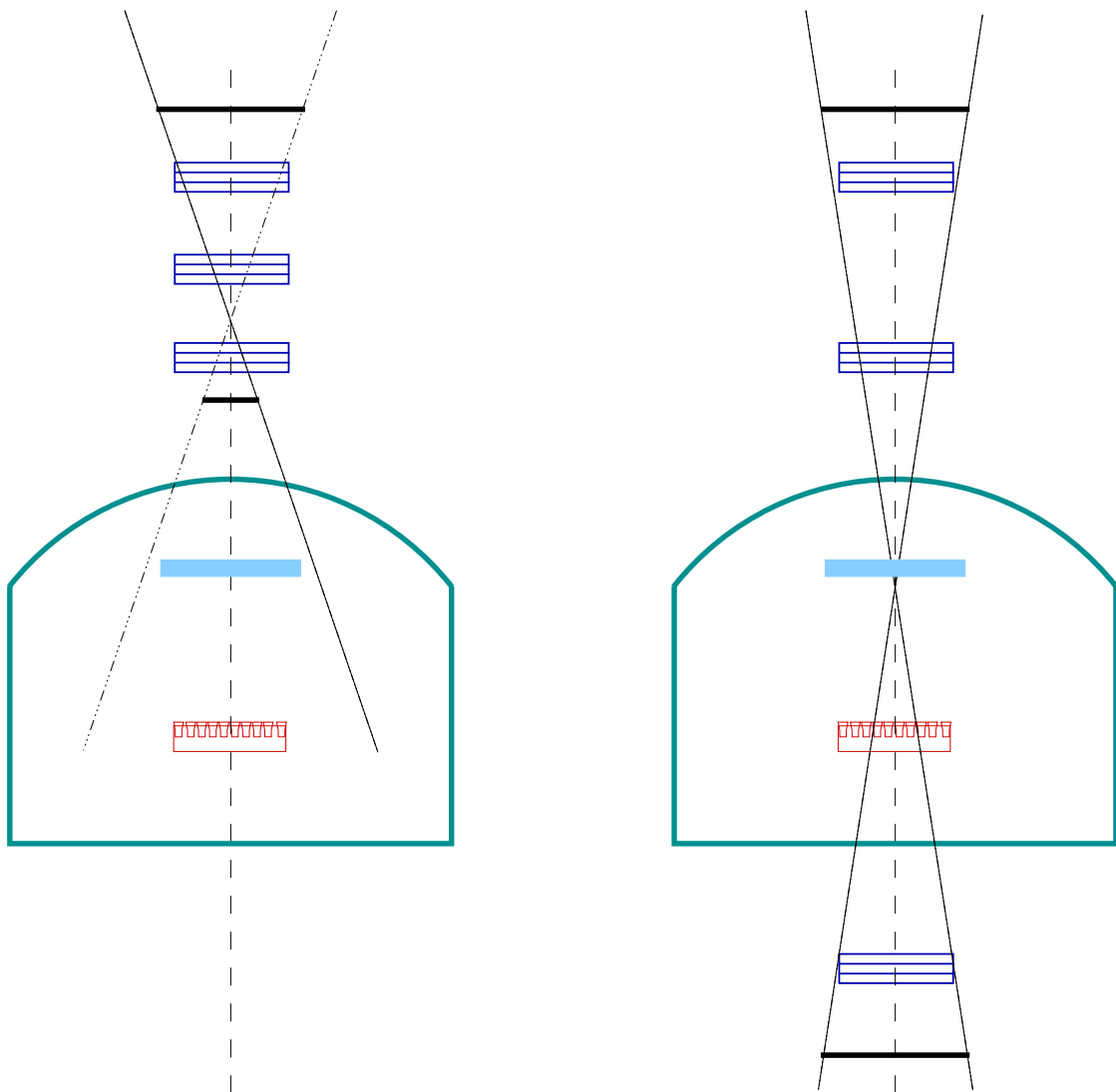


Experimental setup

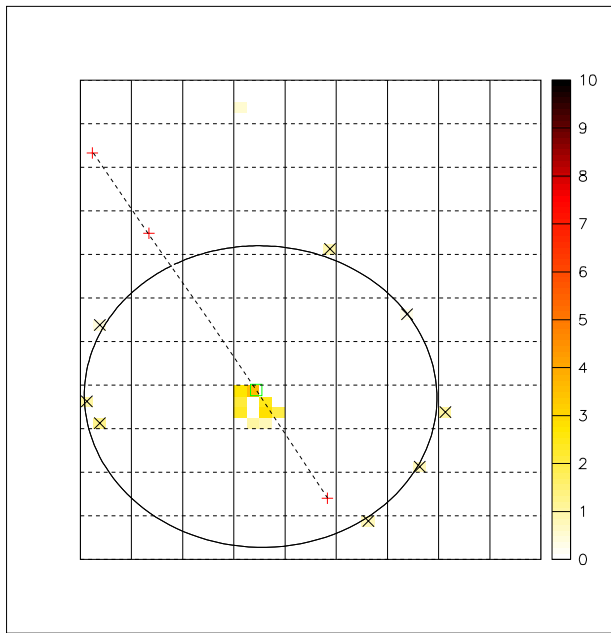


⇒ Better trajectory resolution.

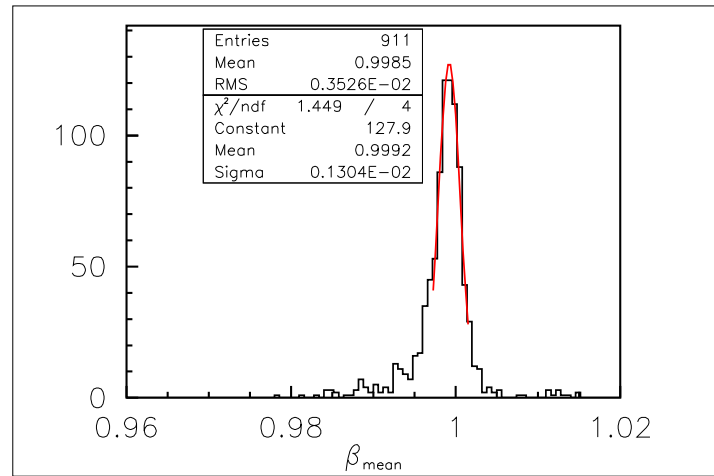
⇒ Smaller acceptance.

AGL 1.03

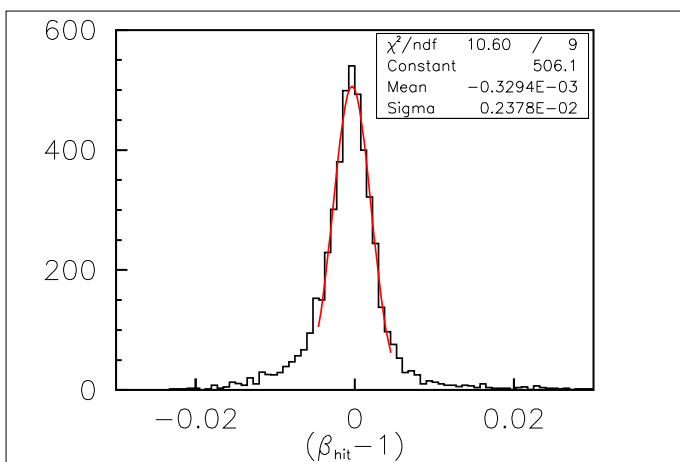
Drift: 41.6cm



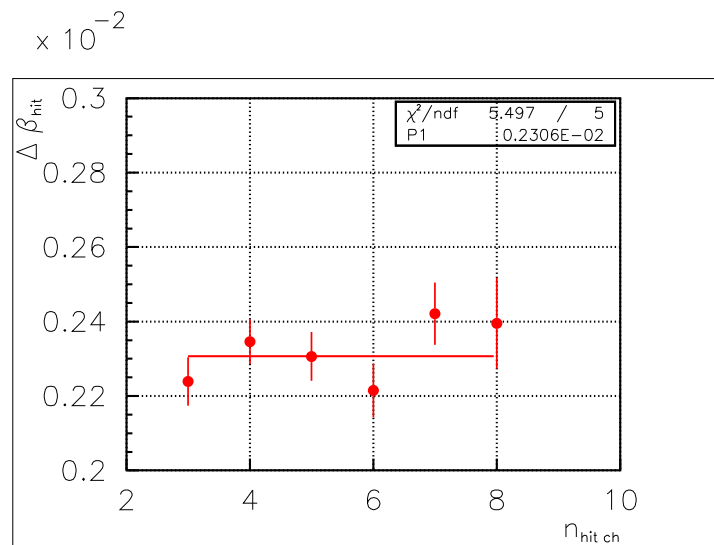
Display event #615



Reconstructed mean β



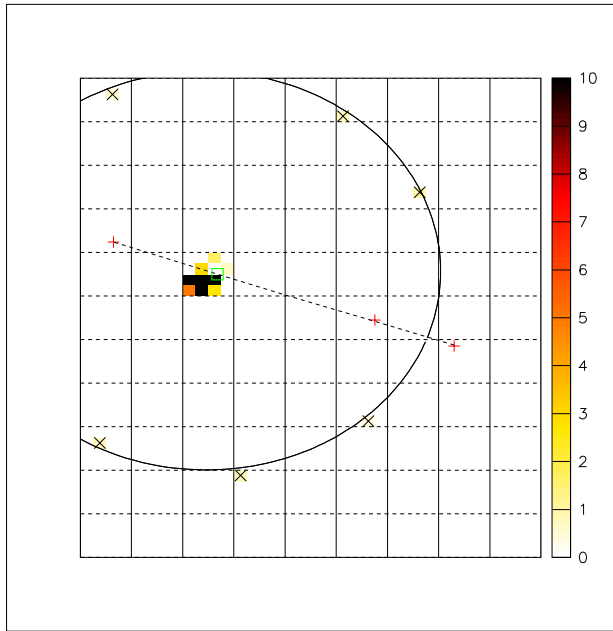
β per hit



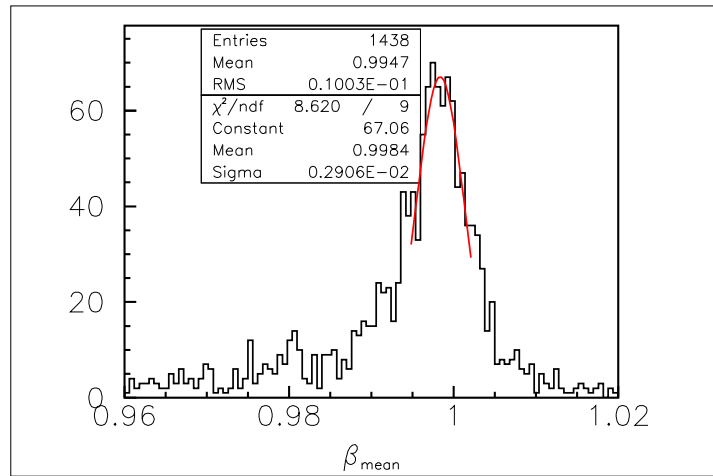
$\sqrt{\frac{n_{hit}}{n_{hit}-1}} (\beta_{hit} - \beta_{mean})$ vs n_{hit}

AGL 1.05

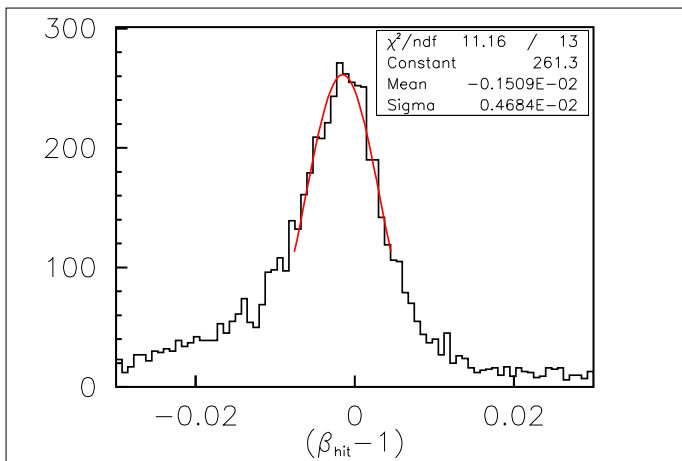
Drift: 41.6cm



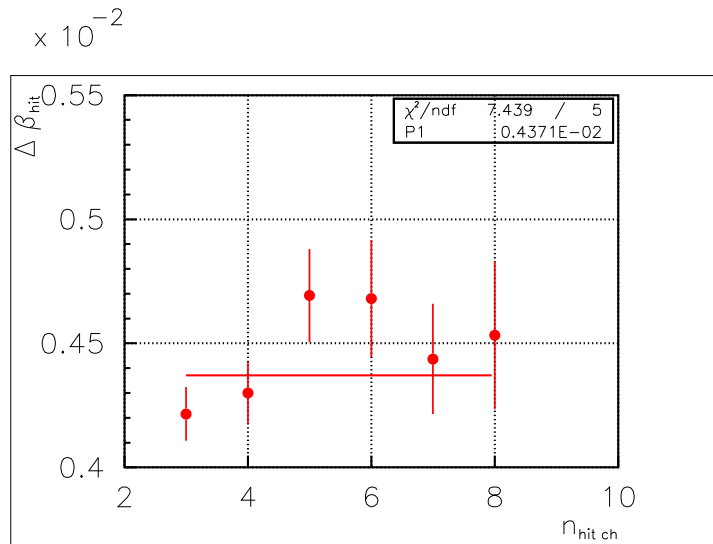
Display event #8532



Reconstructed mean β



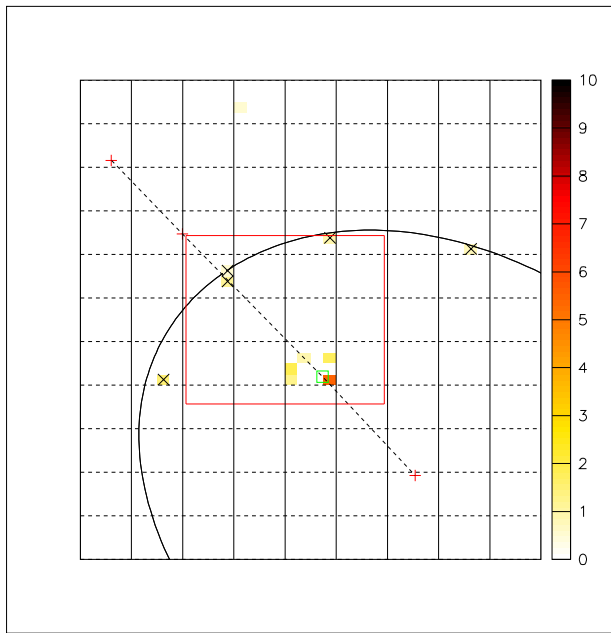
β per hit



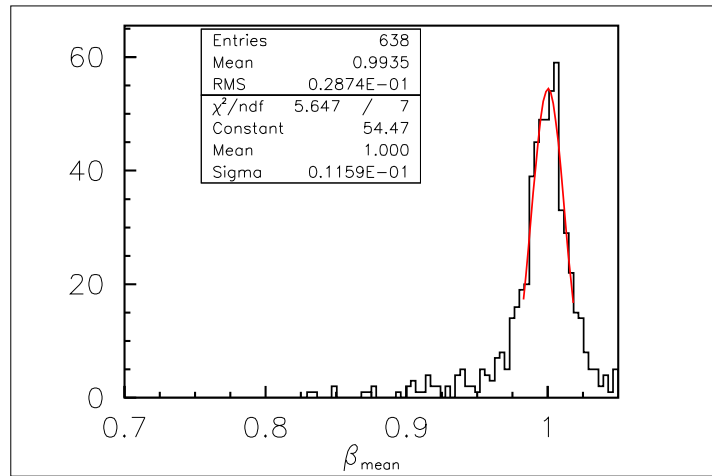
$\sqrt{\frac{n_{hit}}{n_{hit}-1}} (\beta_{hit} - \beta_{mean})$ vs n_{hit}

NaF 1.33

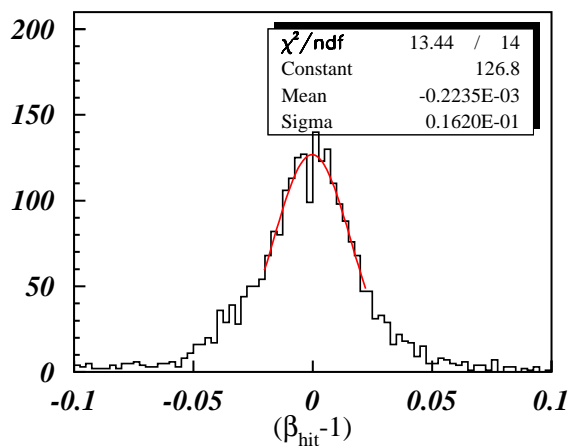
Drift: 7.5cm



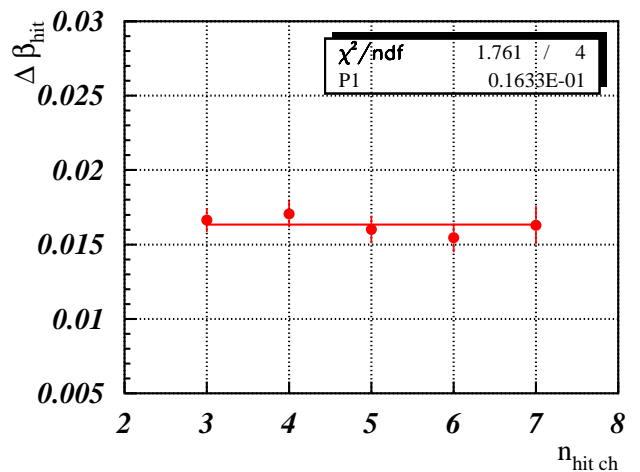
Display event #3064



Reconstructed mean β



β per hit



$$\sqrt{\frac{n_{hit}}{n_{hit}-1}} (\beta_{hit} - \beta_{mean}) \text{ vs } n_{hit}$$

Summary of resolutions ($\times 10^{-3}$)

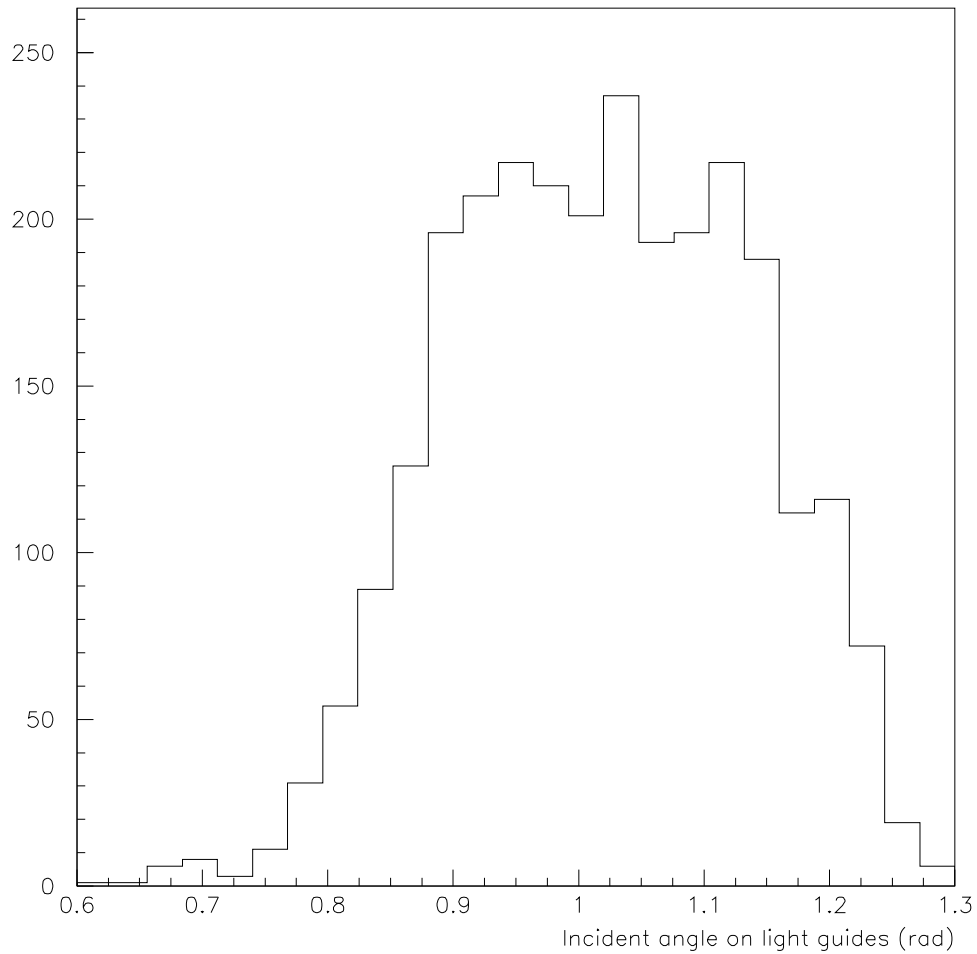
Cosmic runs results

Radiator	AGL 1.03	AGL 1.05	NAF 1.33
$\delta\beta_{mean}$	1.3	2.9	11.6
$\delta\beta_{hit}$	2.4	4.7	16.2
$\delta\beta_{hit2}$	2.3	4.4	16.33

Rough estimation of the resolution

$\frac{\delta\beta_{th}}{\beta}$	AGL 1.03	AGL 1.05	NaF 1.33
pixel	1.09	1.32	5.2
width	1.15	1.2	2.62
chrom.	.81	1.27	4.19
index disp.	0.53	0.77 (2.)	0.
coul. diff.	.35	.46	1.97
traj	0.6	0.74	3.59
total	1.98	2.47 (3.1)	8.26*

NaF “problem”



Around 1 rad

- Low light guide efficiency
- Important crosstalk

Time schedule

- today → 07/10: Prototype upgrade.
light guides gluing, new electronics, mechanical adaptation for CERN tests.
- 07/10 → 08/15: Prototype available for cosmic runs.
- from 08/15: CERN test beam preparation.