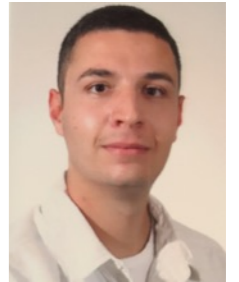
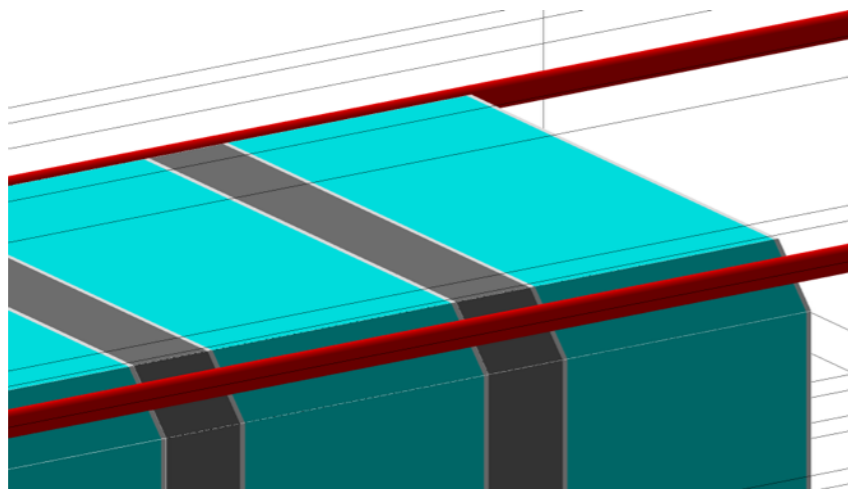
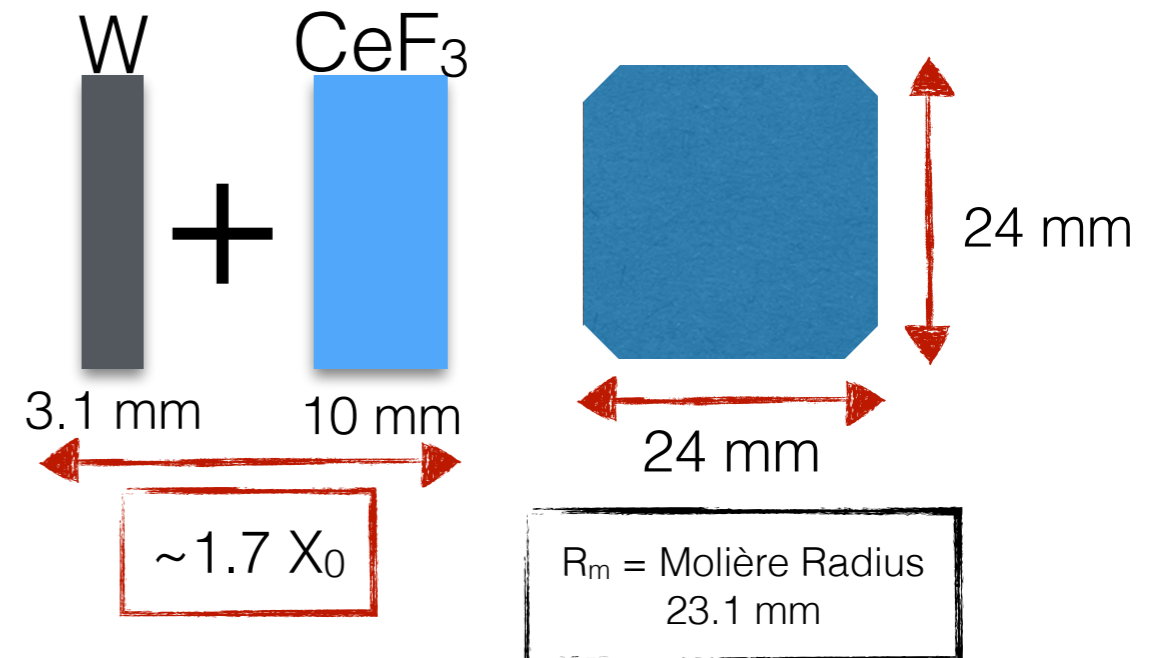
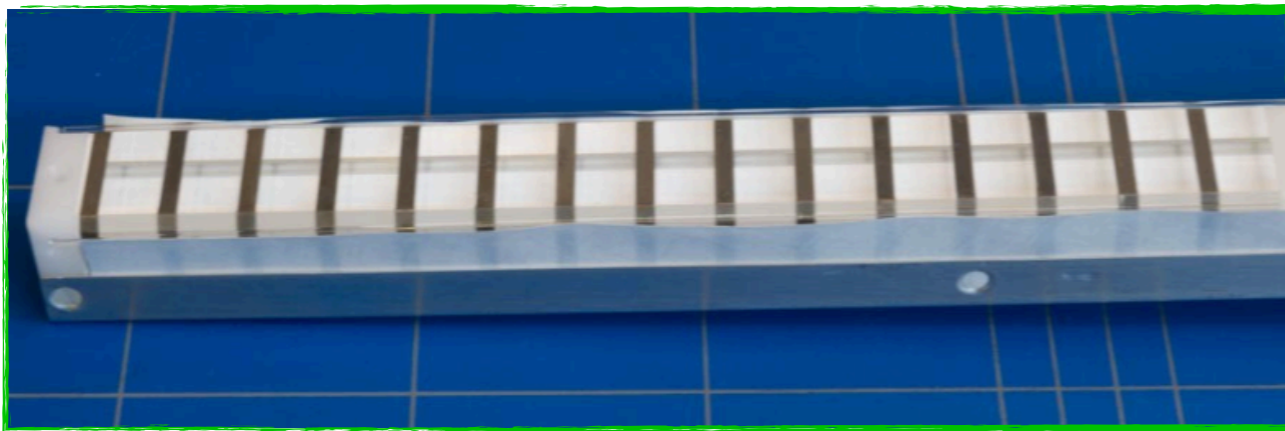


HL-LHC



Endcap: high rad. damage (30 Gy/h)

Radiation-hard material

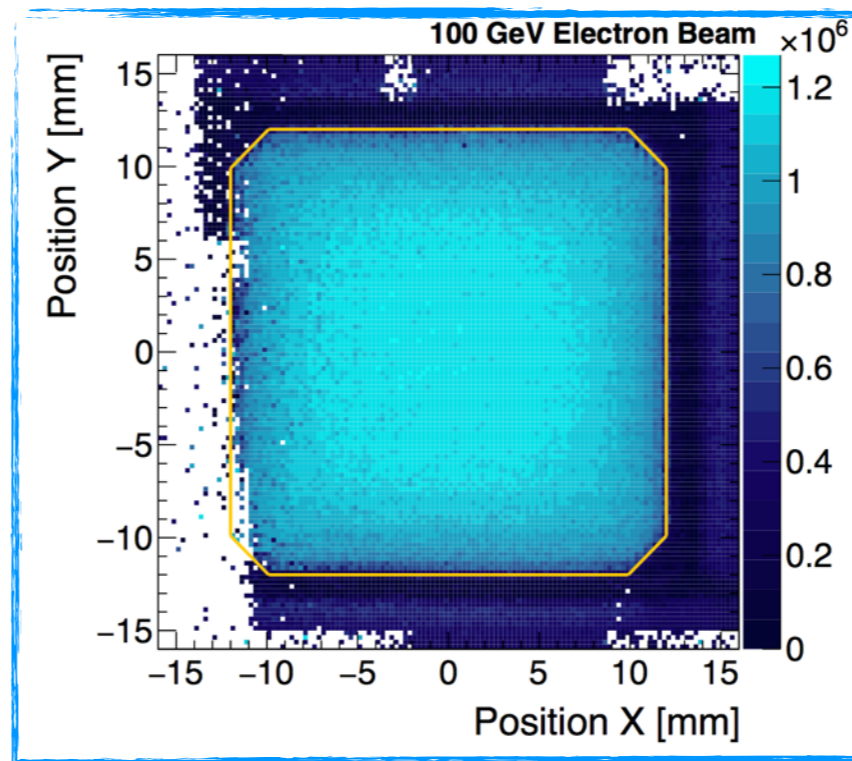
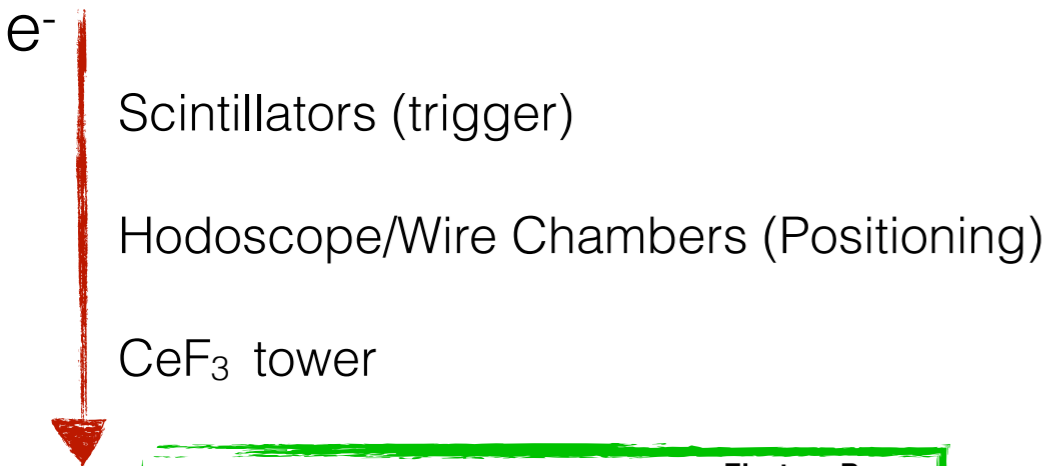


Signal read through WLS scintillating fibres housed in the chamfered edges of the crystal

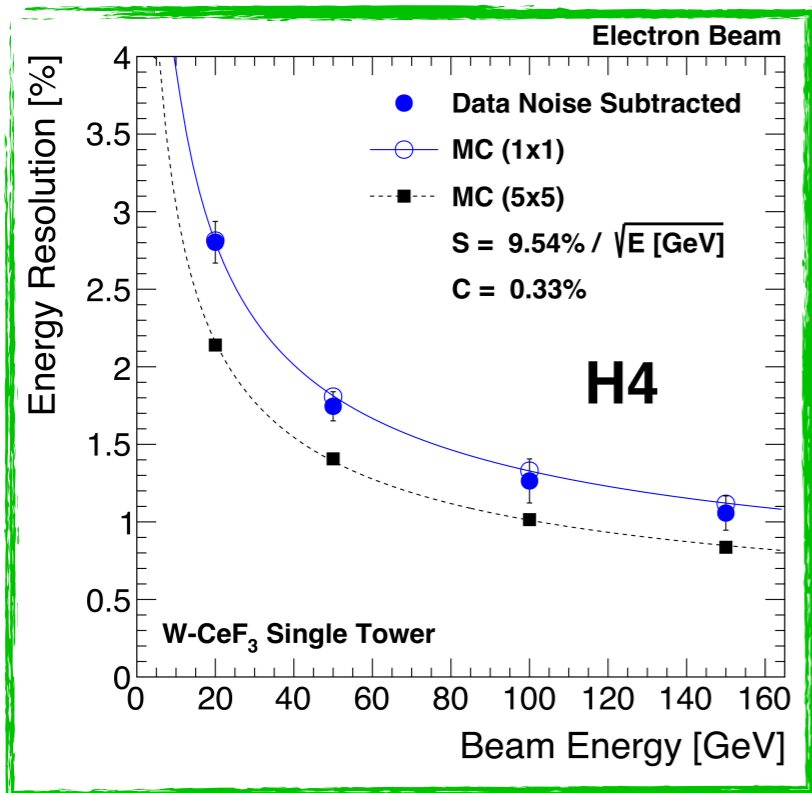
Beam Test Results

2 Beam Test → Frascati BTF ($E(e^-)=491$ MeV - $17 X_0$)
 → CERN-SPS H4 ($E(e^-)$ up to 150 GeV - $25 X_0$)

General Beam Line schema



Response map of the W-CeF₃ channel as a function of the impact point with the channel dimension superimposed



Energy Resolution

$$\frac{\Delta E}{E} = \frac{N}{E} \oplus \frac{S}{\sqrt{E}} \oplus C$$

$S = 9.7\%$

Stochastic Term Frascati

$S = 9.54\%$
 $C = 0.33\%$

Stochastic and Constant Term H4

Good Resolution: suitable for HL-LHC