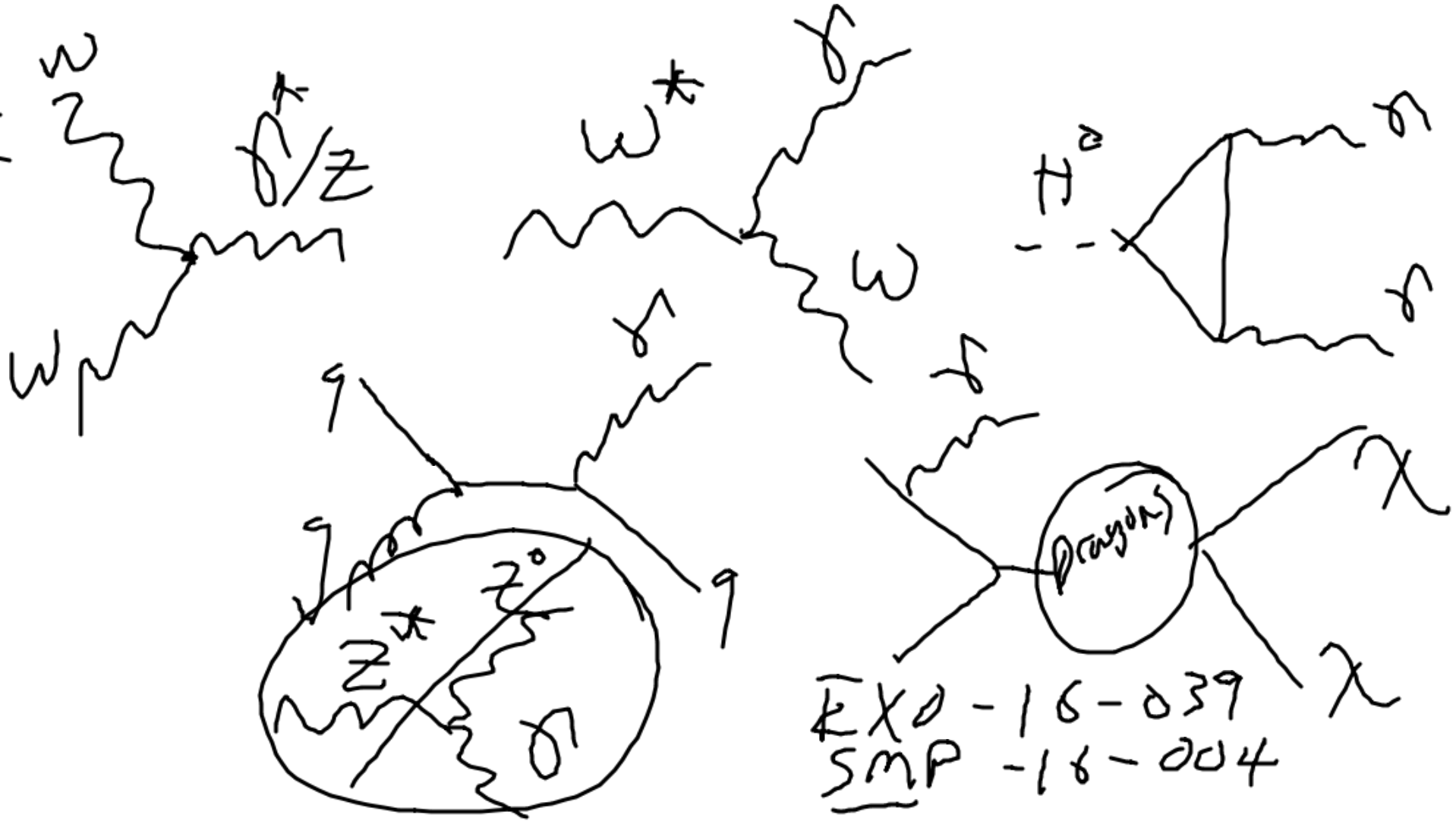
1.) Great
2.) Tricky
3.) Important

Great



EXO-16-039
SMP-16-004

Tricky γ's are NON-redundant

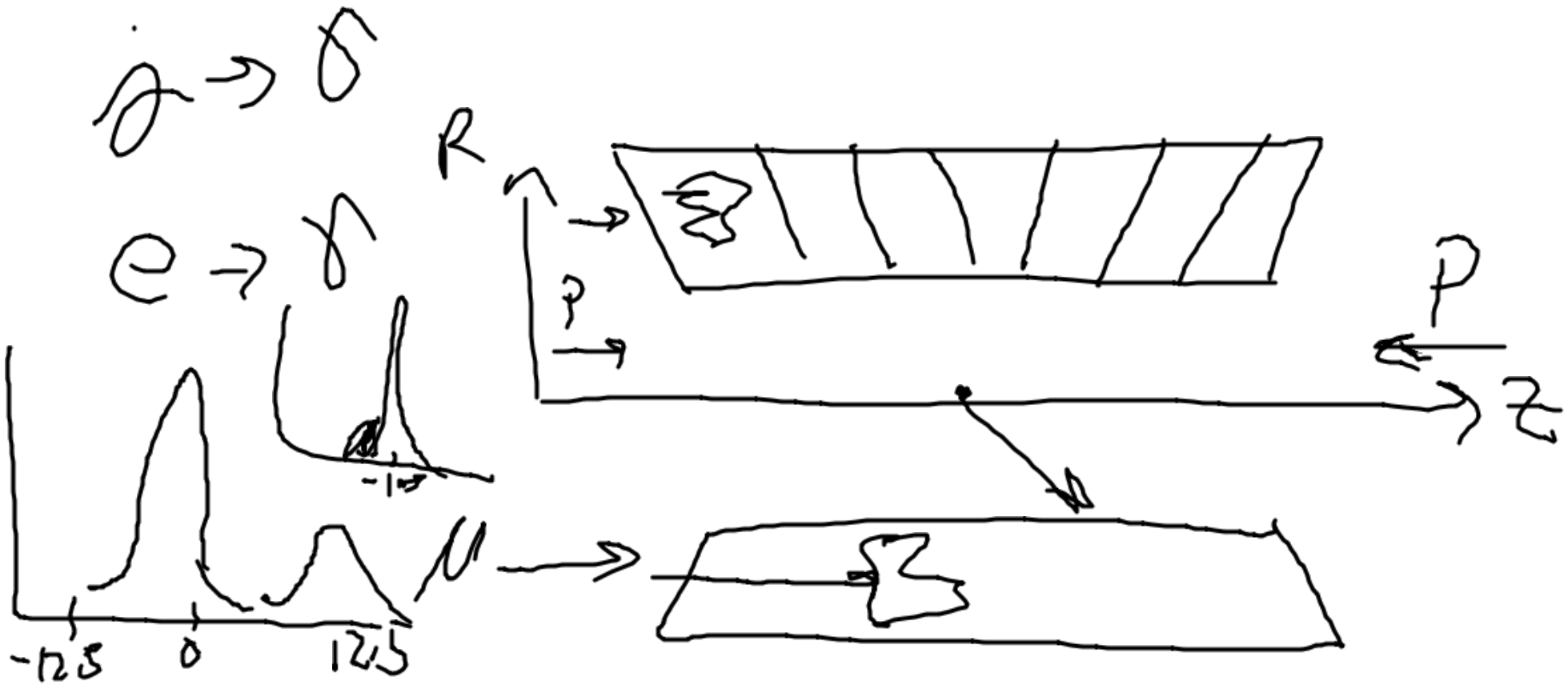
ECAL tiny!

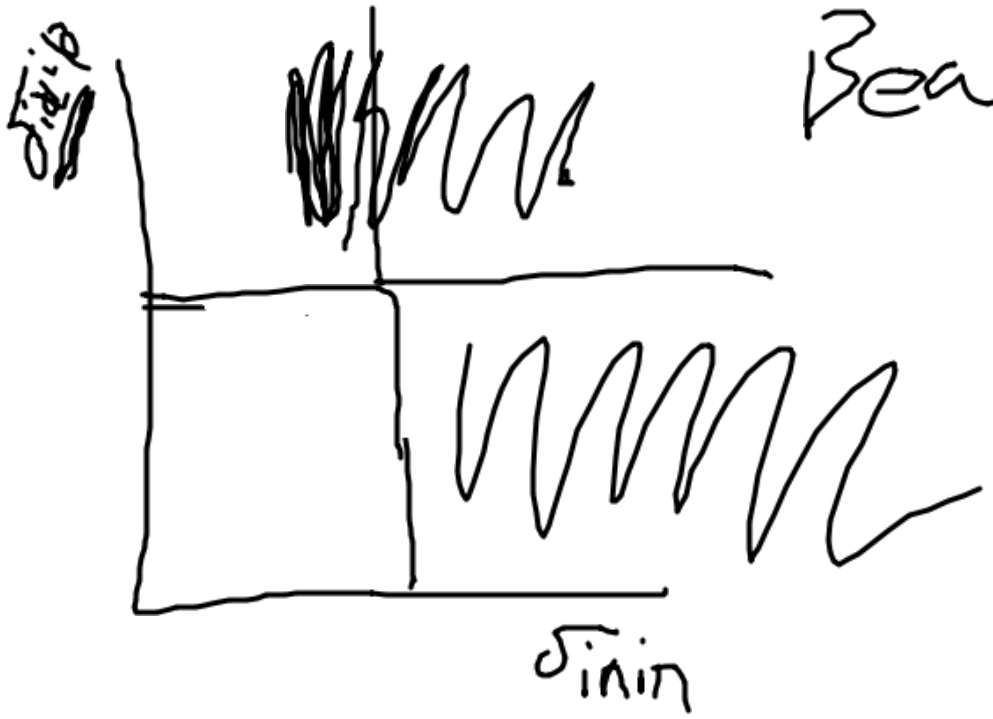
Uncorr. σ
97-98% of E is with 5×5 array

Energy
Spatial dist.
Timing

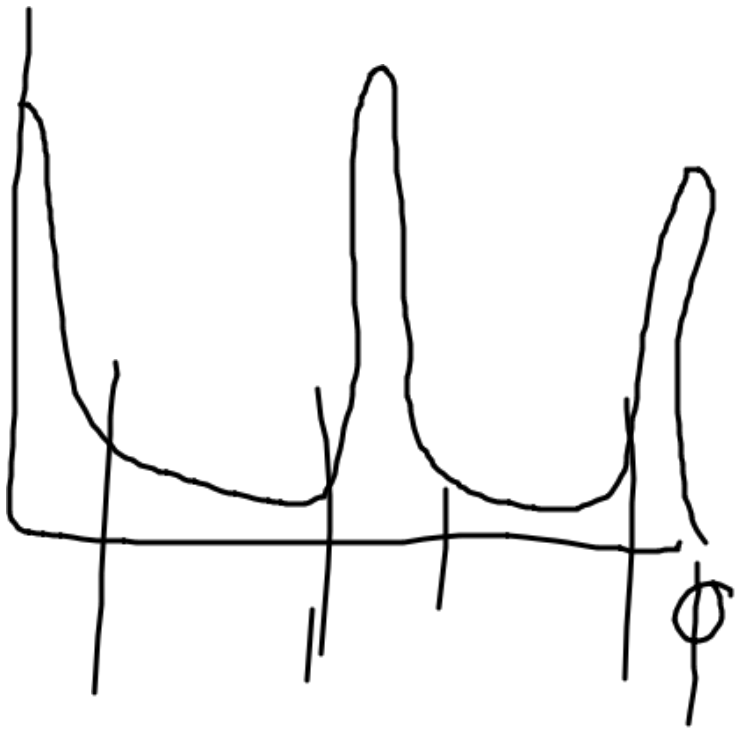
61,200 barrel crystal

Beam and instrumental bkg

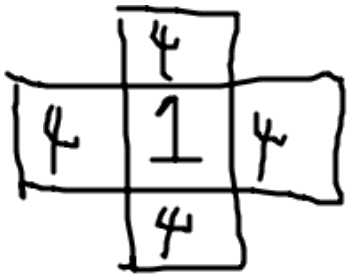




Beam Halo



Spikes

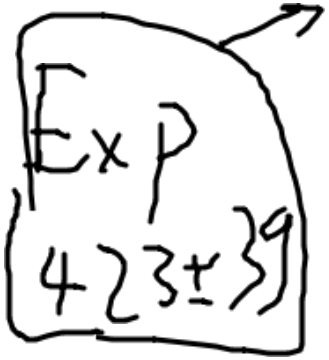


$1 - \frac{S_4}{S_1} < X$

Isolated case

, L1 FGVB

+HLT Swiss Cross



400 candidates $E_T^\gamma > 125$

215±32 $Z\gamma \to \nu\nu\gamma$

57±8 $W\gamma \to l\nu\gamma$

54±5 $W^* \to e\nu$

27±13 Spikes

15±11 Halo

ICHEP 2016 ~ 12.9 fb^{-1}

54.6±8 others

$M_{\chi^{\pm}} - M_{\chi_0}$ = small

arXiv:1605.00658

ISR boost + FSR

arXiv 1401.1162

Z + b/j floor

ISR can play important role.

→ ↑ are great because we can set a lower threshold

→ ↑ are great because of precision