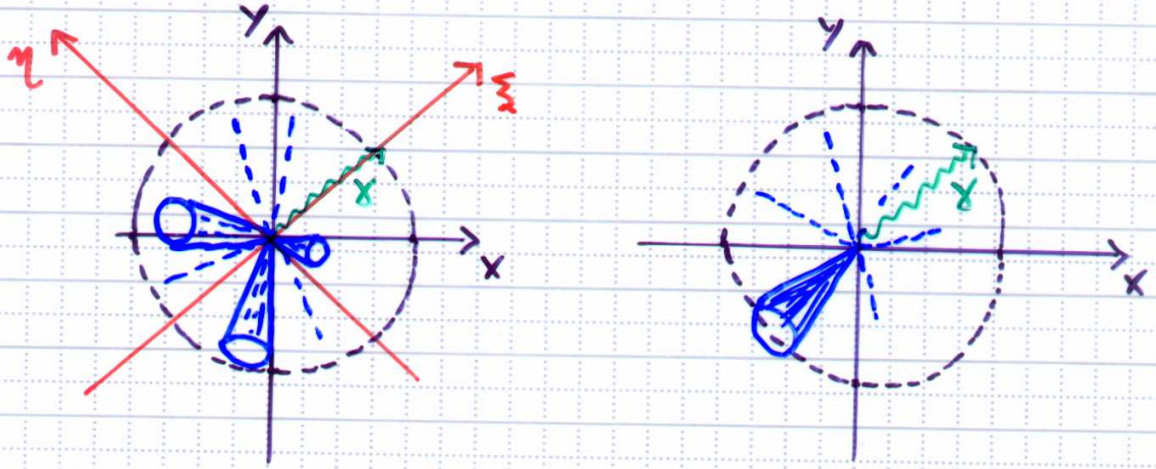
Goals:

① $\not{P}_T$ - balance $\Rightarrow$ jet scale "α_{jet}"

② Minimization of $\not{P}_T$ resolution "α_{UE}"
(transverse component)

→ transverse plane → φ rotation
(project all transverse energies on γ-direction)



$\langle E_\xi \rangle = E_\gamma$
$\langle E_\eta \rangle = 0$
} → measure of resolution sensitive to und. event (?)

Minimize:

$$\chi_1^2 := \sum_{i=1}^{N_{evt}} \left(E_\gamma - \sum_{k=1}^{N_{jet}} \alpha_{jet}(E_T, \eta)\, E_\xi(jet_k) - \sum_{l=1}^{N_C} \alpha_{UE}(E)\, E_\xi^c \right) / \delta_{jet}$$

$$\chi_2^2 := \sum_{i=1}^{N_{evt}} \left(\sum_{k=1}^{N_{jet}} \alpha_{jet}(E_T, \eta) \cdot E_\eta(jet_k) + \sum_{l=1}^{N_C} \alpha_{UE}(E) \cdot E_\eta^c \right) / \delta_{jet}$$

(δ_{jet} to be determined iteratively) ($\delta_{jet} = \delta_{jet}(E)$)