

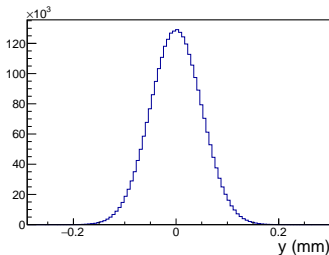
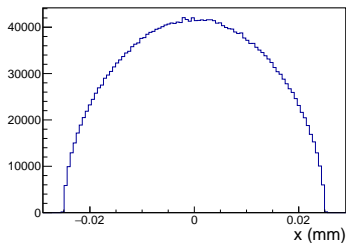
HyCal Trigger Position Resolution

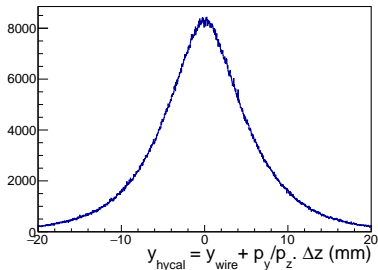
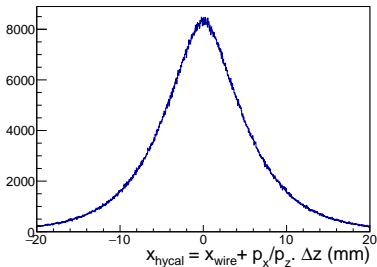
Maxime Levillain

December 1, 2016



- ▶ Simulation of photon beam profile provided by Ilya
- ▶ $\sigma_y = 50 \mu m$
- ▶ tungsten x wire with a thickness of $25 \mu m$

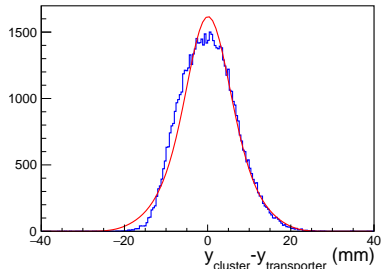
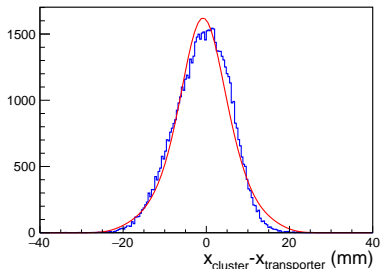




- ▶ Same distribution in x and y (fortunately)

- ▶ photon beam distribution f , gaussian distribution g and final distribution h

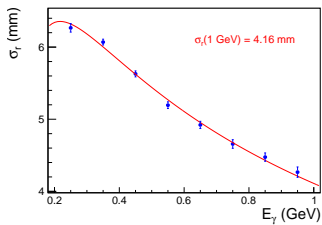
$$h(x) = \int_{-\infty}^{\infty} f(t) * g(x - t) dt$$



- ▶ Some problems to fit the shape for crystal at high energy

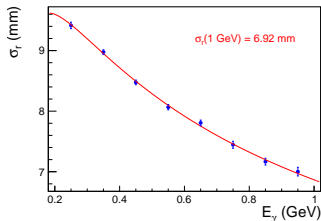
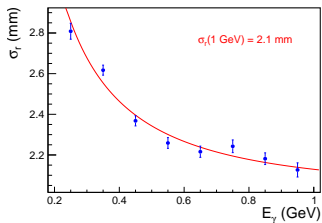
primex

LG



cpp

LG

PbWO₄PbWO₄