

# Analysis of channeling for run 5920, crystal STF110

*Run date: 2017-12-04*

*Particle type: Xenon*

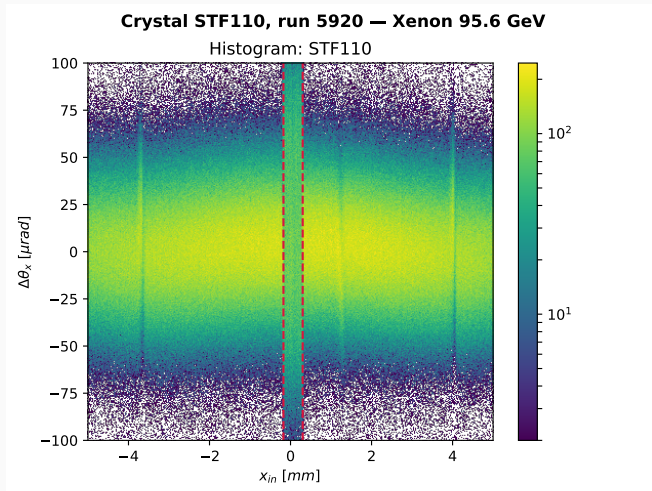
*Particle energy: 95.6 GeV*

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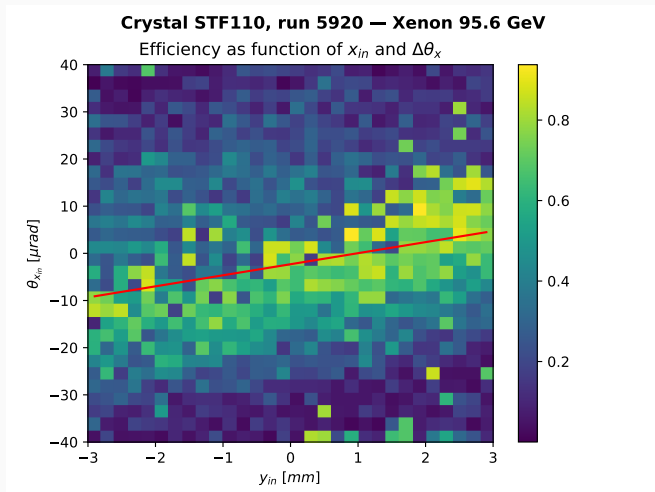
FRANCESCO FORCHER

*December 12, 2017*



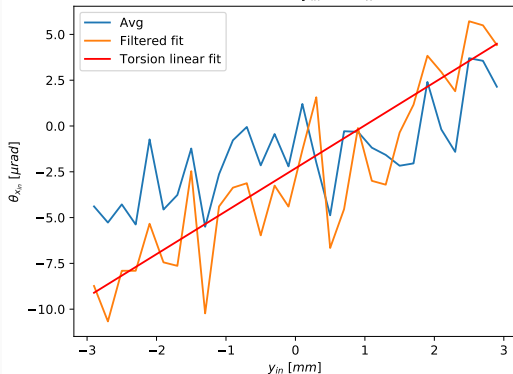


**Figure 1:** *Geometrical cuts in x: -0.175 -> 0.3 [mm]*



**Crystal STF110, run 5920 — Xenon 95.6 GeV**

Torsion fit:  $y_{in}$  vs  $\Delta\theta_x$

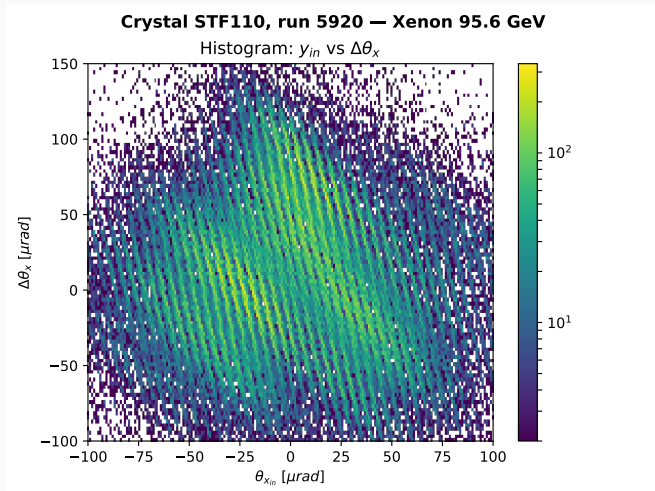


Efficiency fit:

$m$ : 2e+00

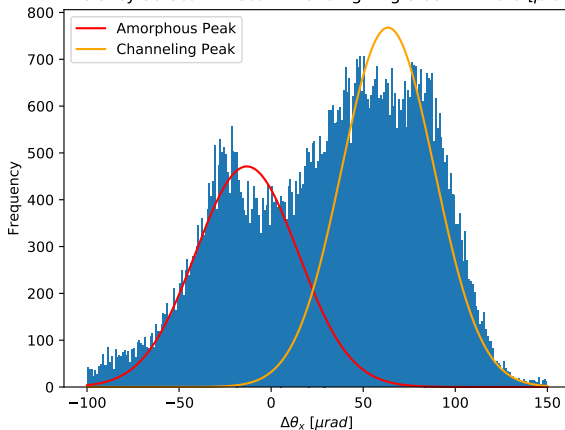
[ $\mu\text{rad}/\text{mm}$ ]

$q$ : -2e+00 [ $\mu\text{rad}$ ]



## STF110 run 5920, Xenon 95.6 GeV — Channeling, cut $\pm \theta_c/2 = \pm 10.5$

Efficiency  $59.5\% \pm 1.5\%$  — Bending Angle  $63.47 \pm 0.8 [\mu\text{rad}]$



**STF110 run 5920, Xenon 95.6 GeV — Channeling, cut  $\pm\theta_c = \pm 21.1$**

Efficiency  $44.6\% \pm 2.2\%$  — Bending Angle  $66.82 \pm 1.0$  [ $\mu\text{rad}$ ]

