

Analysis of channeling for run 4376, crystal STF110

Run date: 2017-05-16

Particle type: Pions

Particle energy: 180 GeV

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December 8, 2017



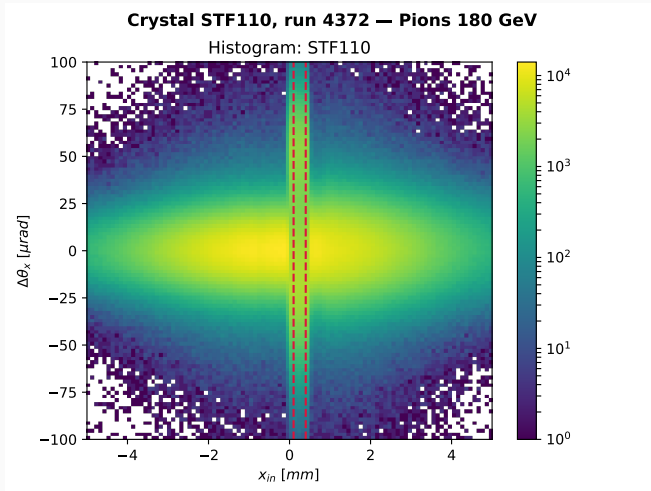
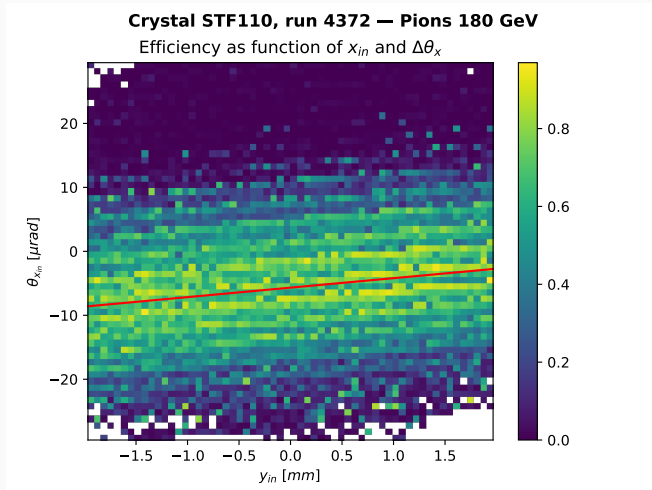
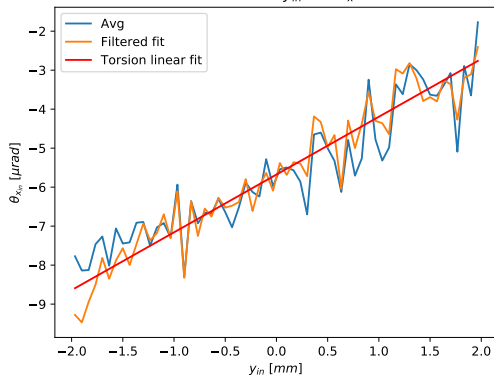


Figure 1: Geometrical cuts in x : 0.0 \rightarrow 0.5 [mm]



Crystal STF110, run 4372 — Pions 180 GeV

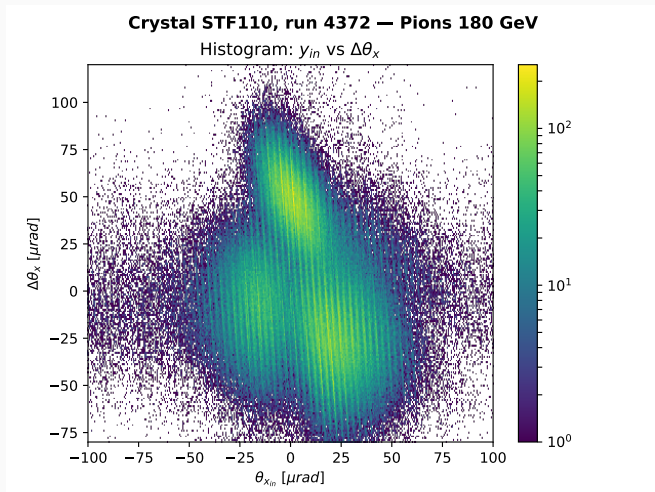
Torsion fit: y_{in} vs $\Delta\theta_x$



Efficiency fit:

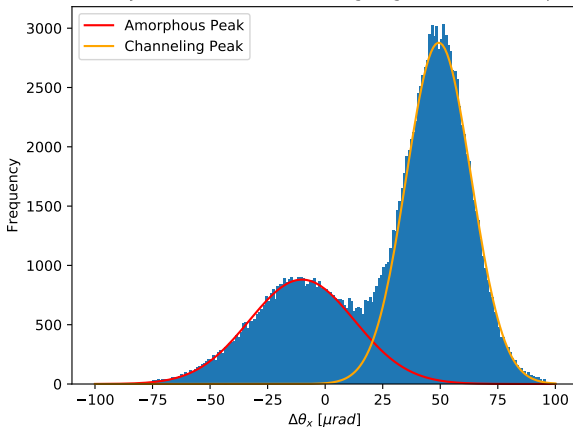
m: $1.51 [\mu rad/mm]$

q: $-5.21 [\mu rad]$



STF110 run 4372, Pions 180 GeV — Channeling, cut $\pm \theta_c/2 = \pm 7.66$

Efficiency $66.8\% \pm 0.3\%$ — Bending Angle 49.33 ± 0.06 [μrad]



STF110 run 4372, Pions 180 GeV — Channeling, cut $\pm\theta_c = \pm 15.3$

Efficiency $54.5\% \pm 0.2\%$ — Bending Angle 48.31 ± 0.06 [μrad]

