

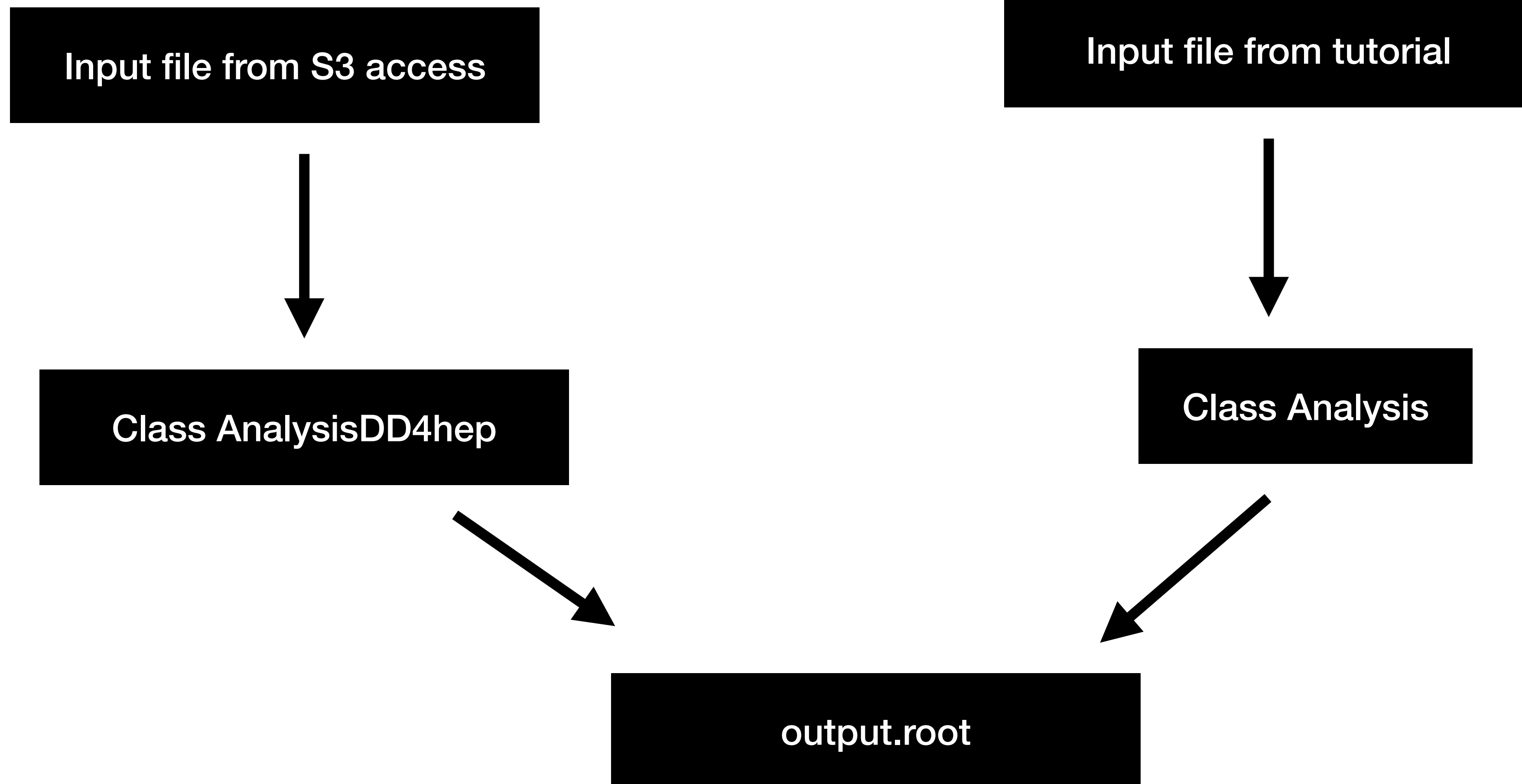
Testing Resolution in SIDIS

Full simulation

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Analysis Framework

<https://github.com/c-dilks/largex-eic>

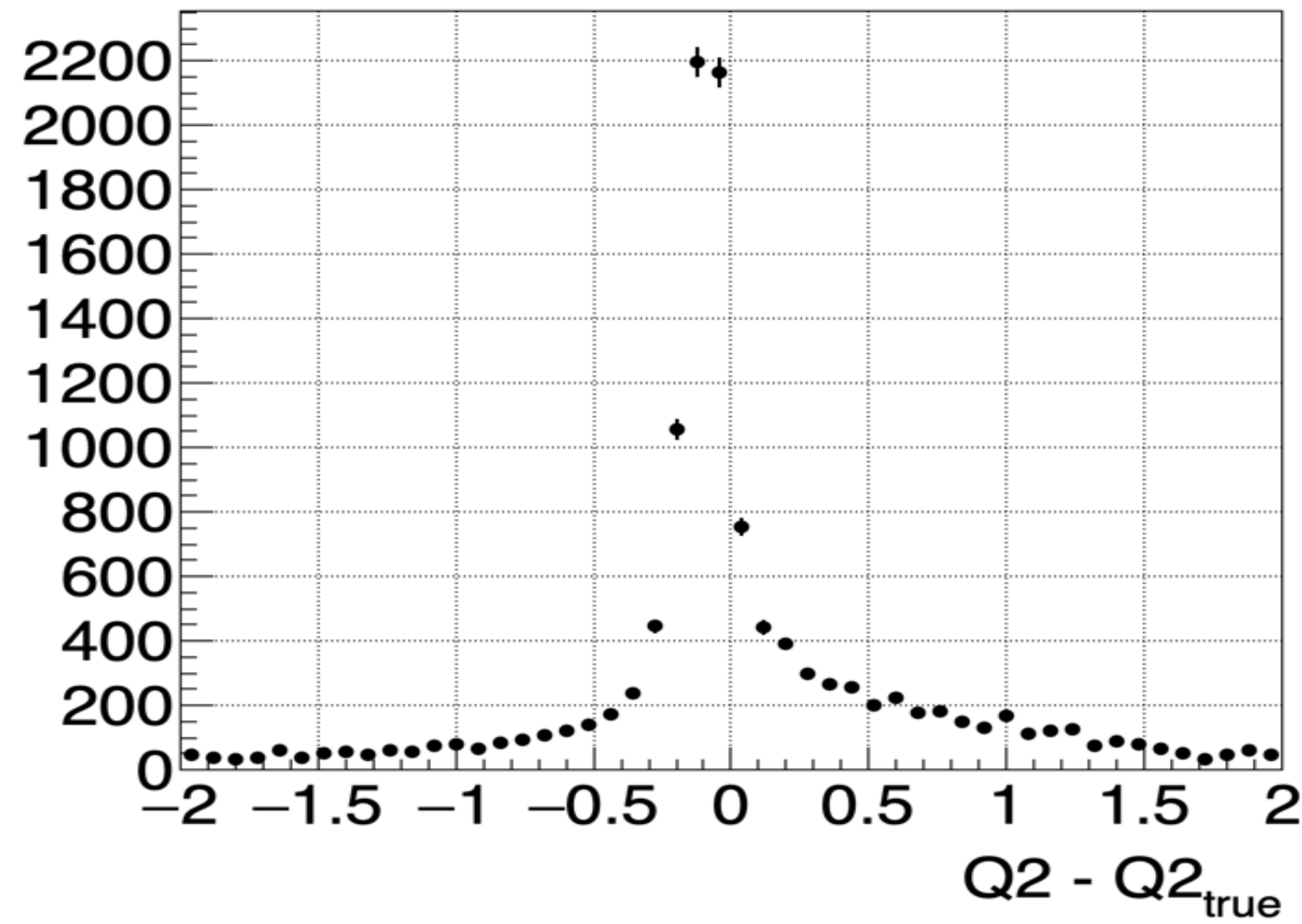


Q2 Resolution ($Q^2 - Q_{TRUE}^2$)

$p_T : 0.00 - 3.00$

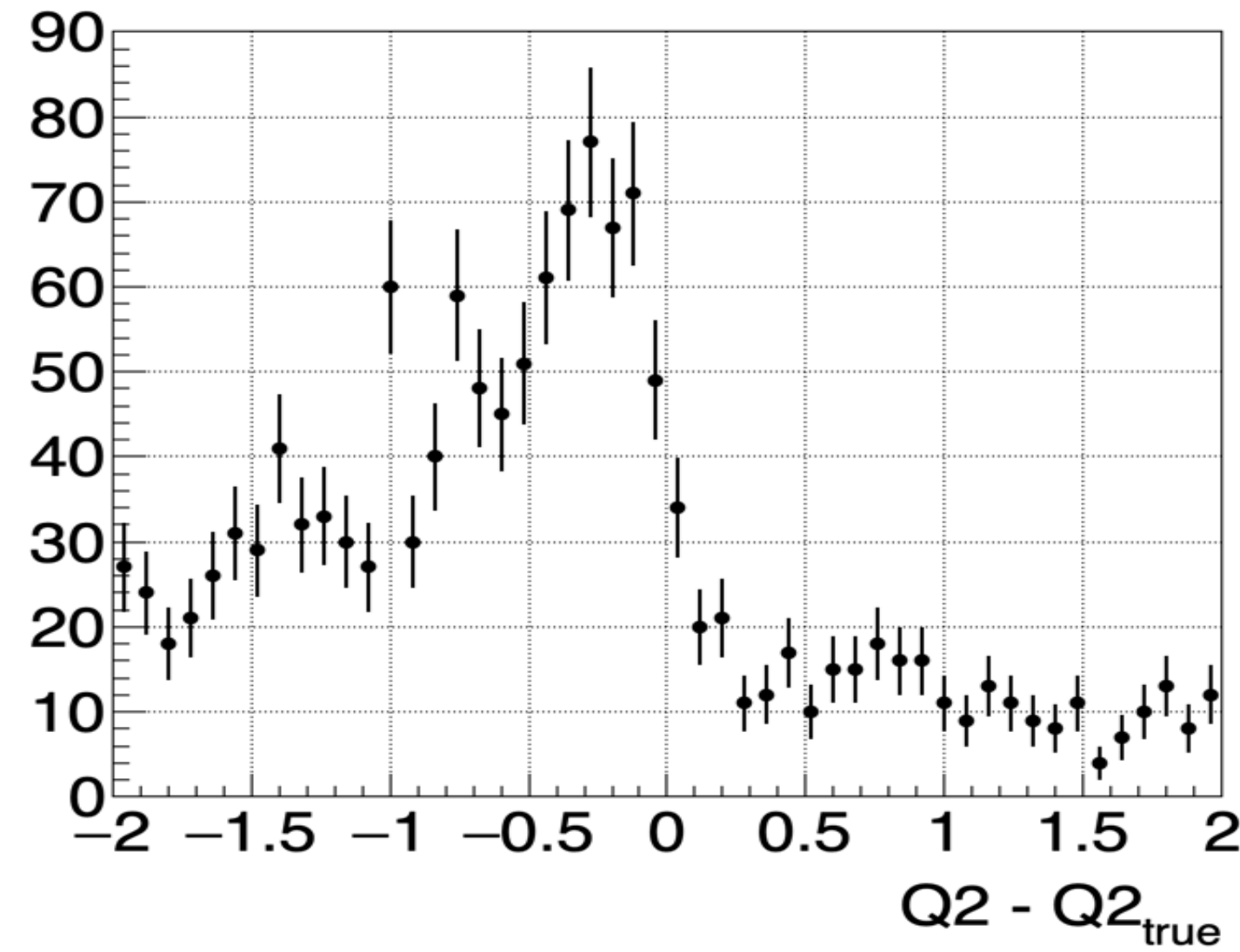
5X41 : Full

Q2 - Q2_{true} distribution, π^+ tracks, full p_T , full x, full z, full Q2, full y



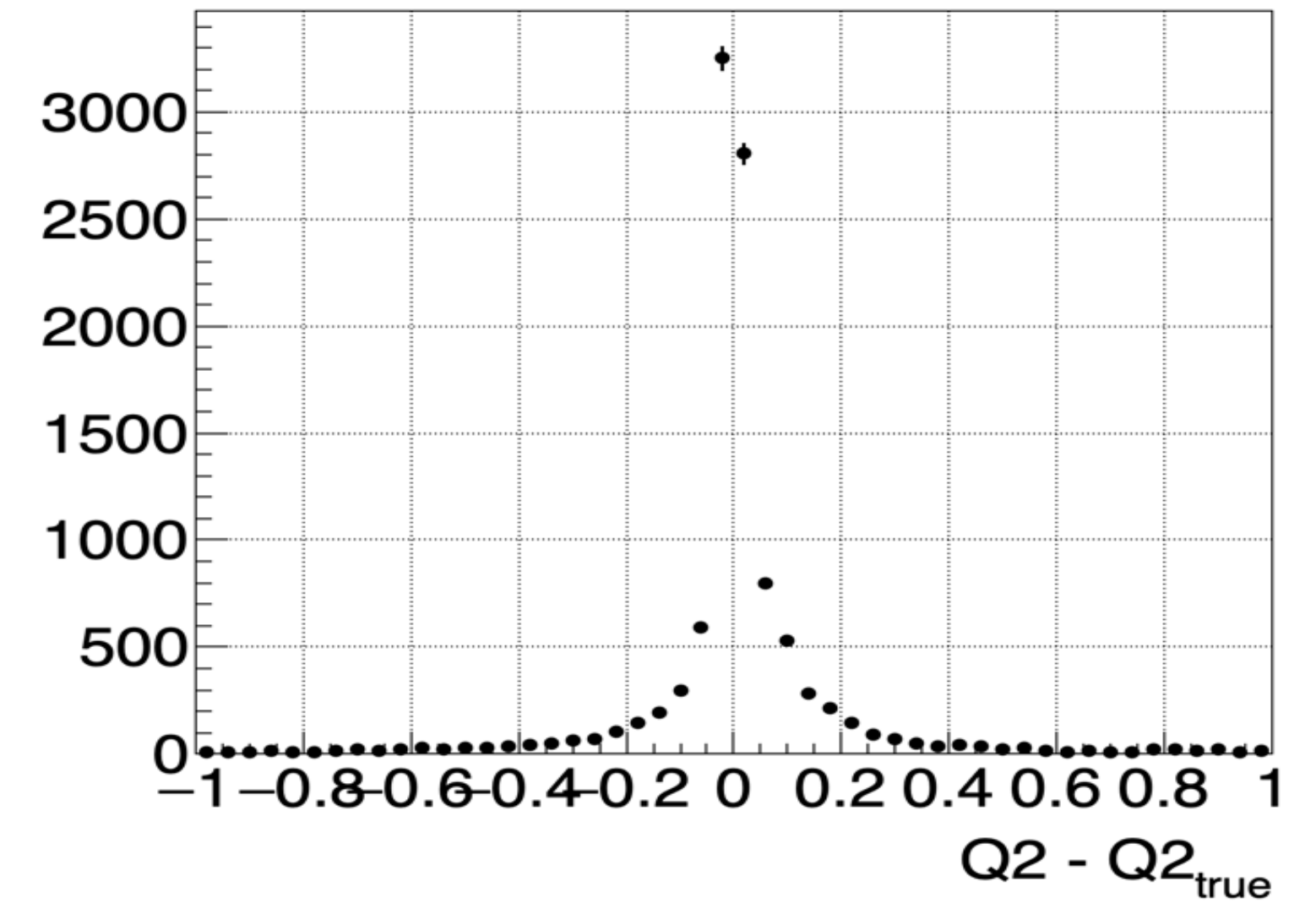
18X275 : Full

Q2 - Q2_{true} distribution, π^+ tracks, full p_T , full x, full z, full Q2, full y



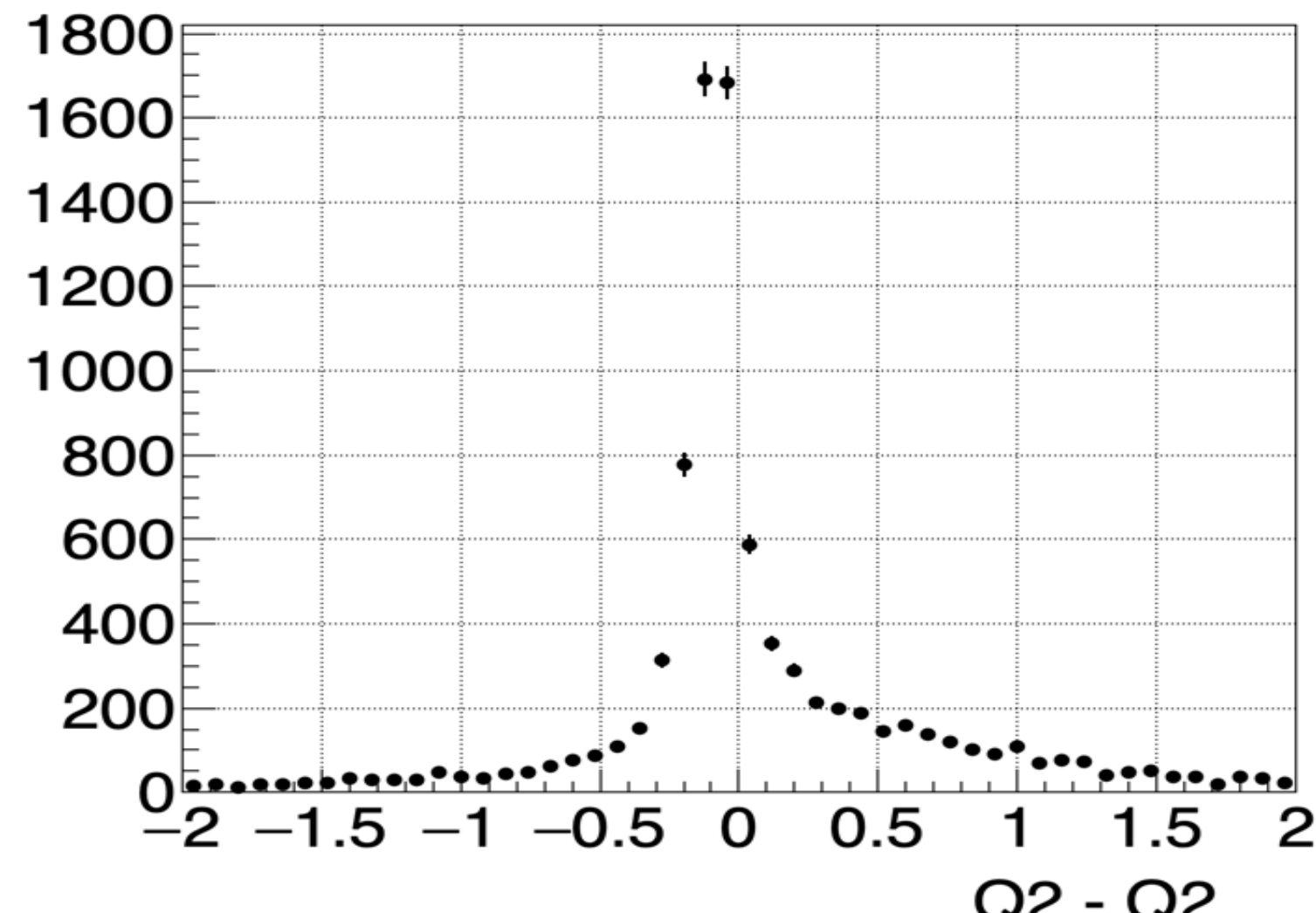
5X41 : Delphes

Q2 - Q2_{true} distribution, π^+ tracks, full p_T , full x, full z, full Q2, full y

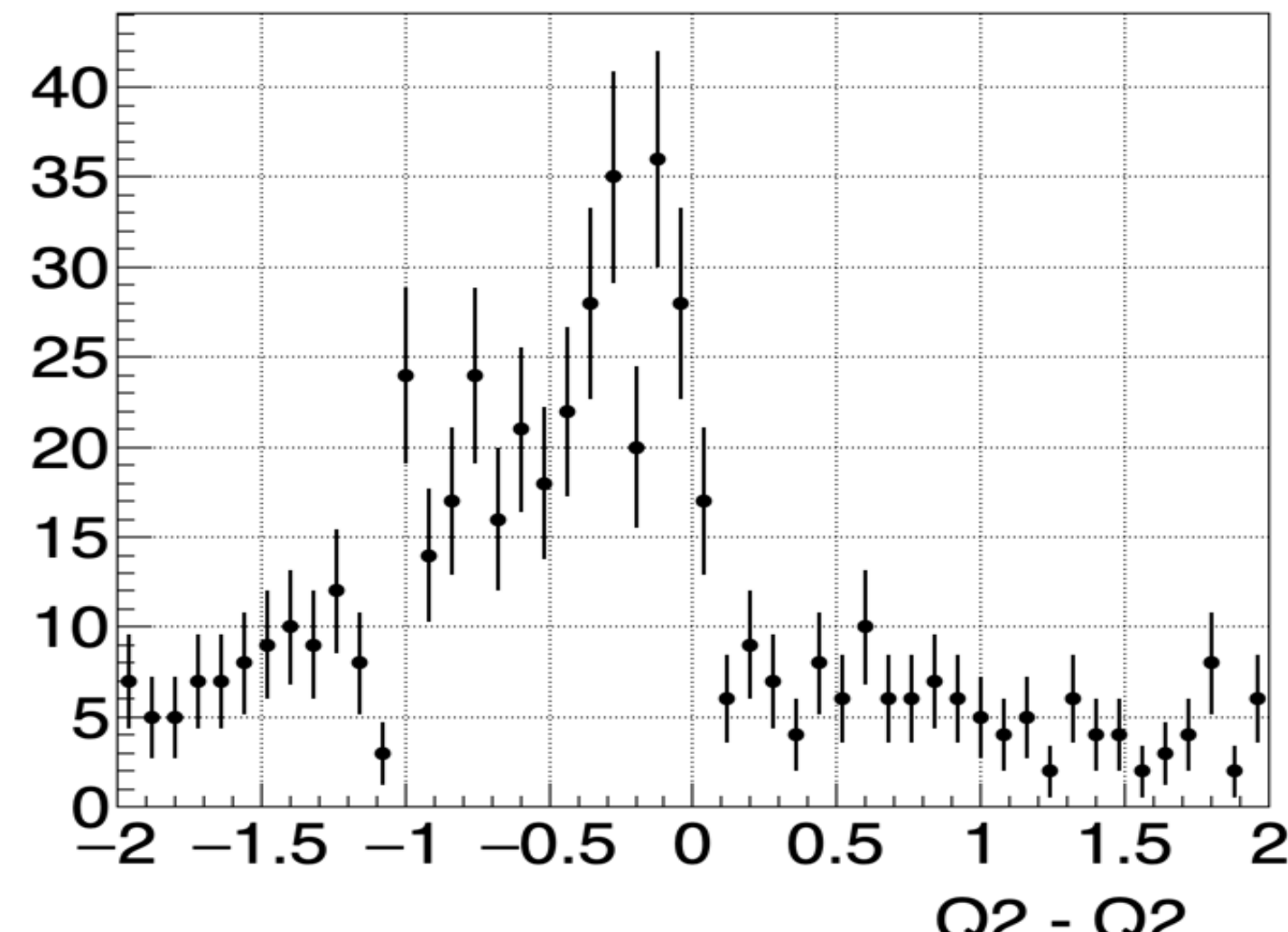


$p_T : 0.00 - 0.75$

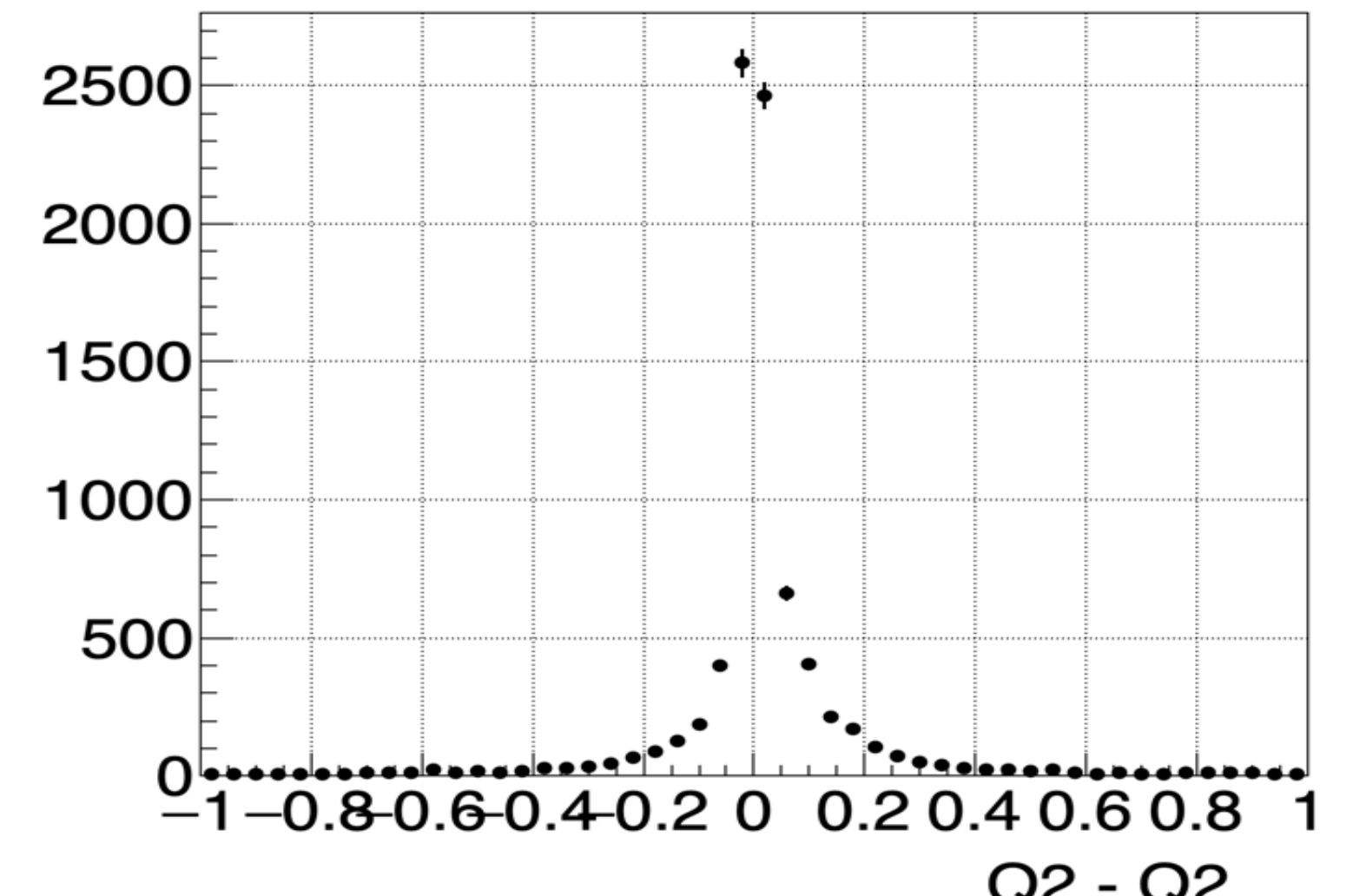
Q2 - Q2_{true} distribution, π^+ tracks, $0.00 < p_T < 0.75$, full x, full z, full Q2, full y



Q2 - Q2_{true} distribution, π^+ tracks, $0.00 < p_T < 0.75$, full x, full z, full Q2, full y



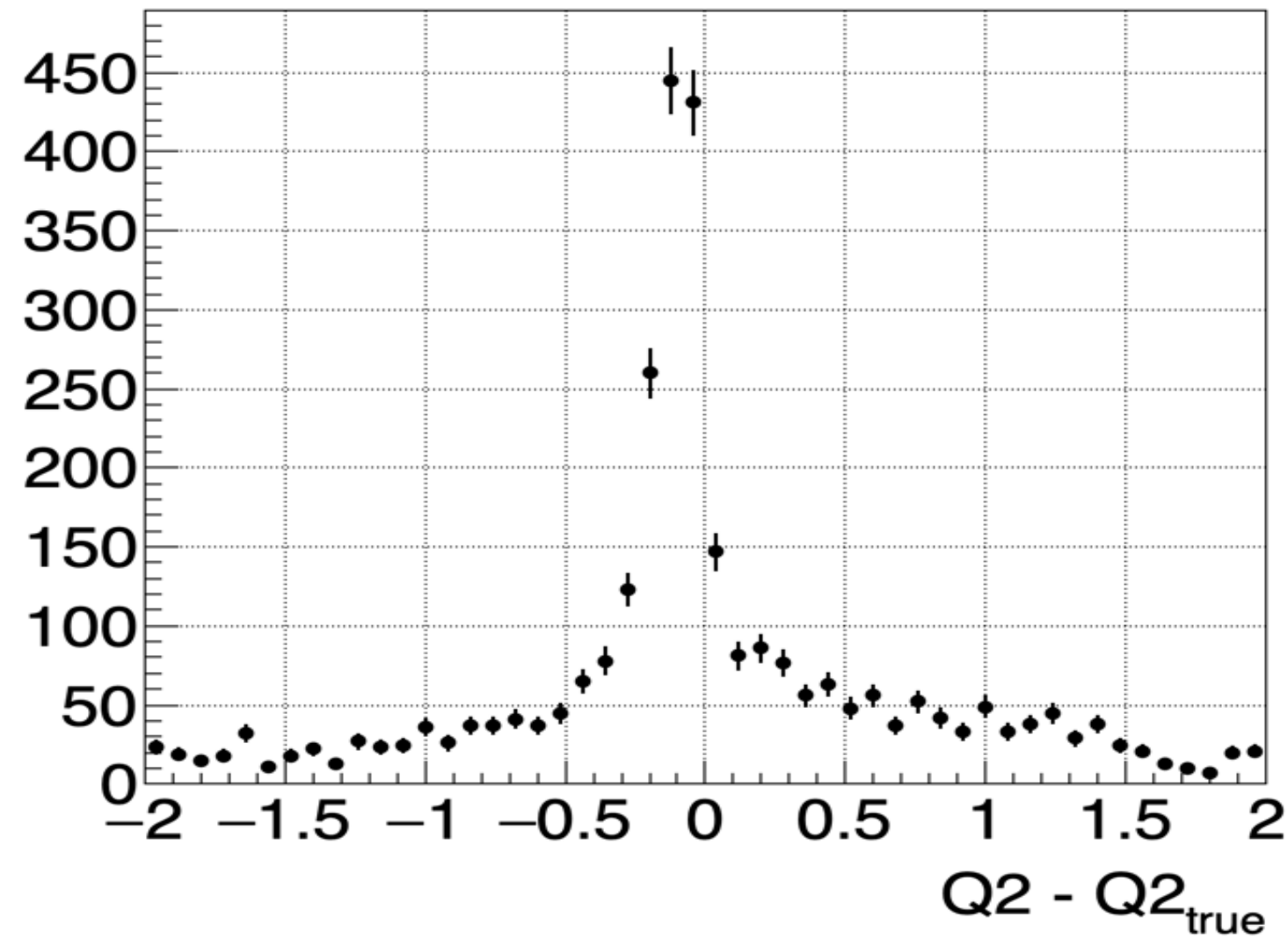
Q2 - Q2_{true} distribution, π^+ tracks, $0.00 < p_T < 0.75$, full x, full z, full Q2, full y



$p_T : 0.75 - 1.50$

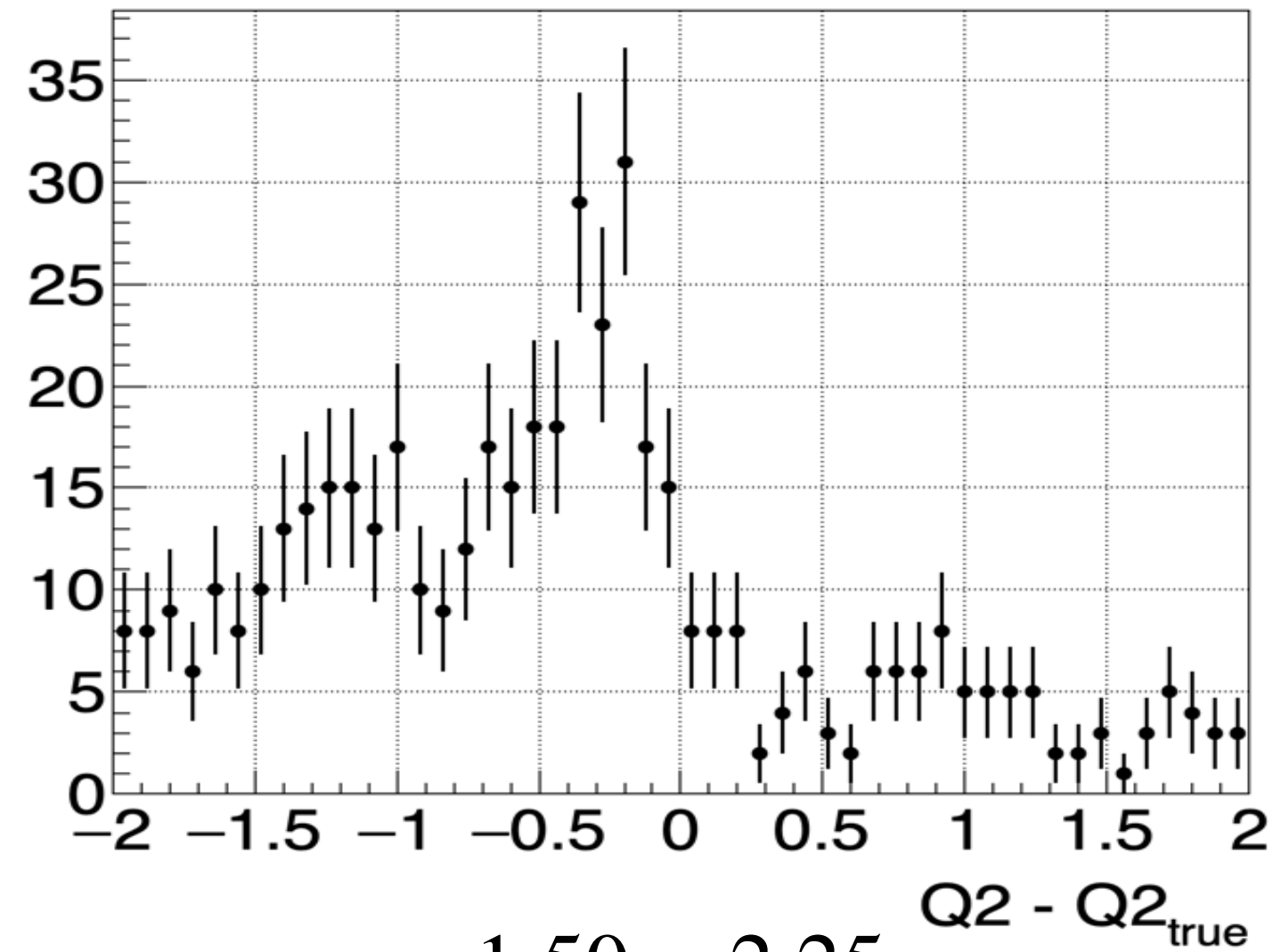
5X41 : Full

Q2 - Q2_{true} distribution, π^+ tracks, $0.75 < p_T < 1.50$, full x, full z, full Q2, full y



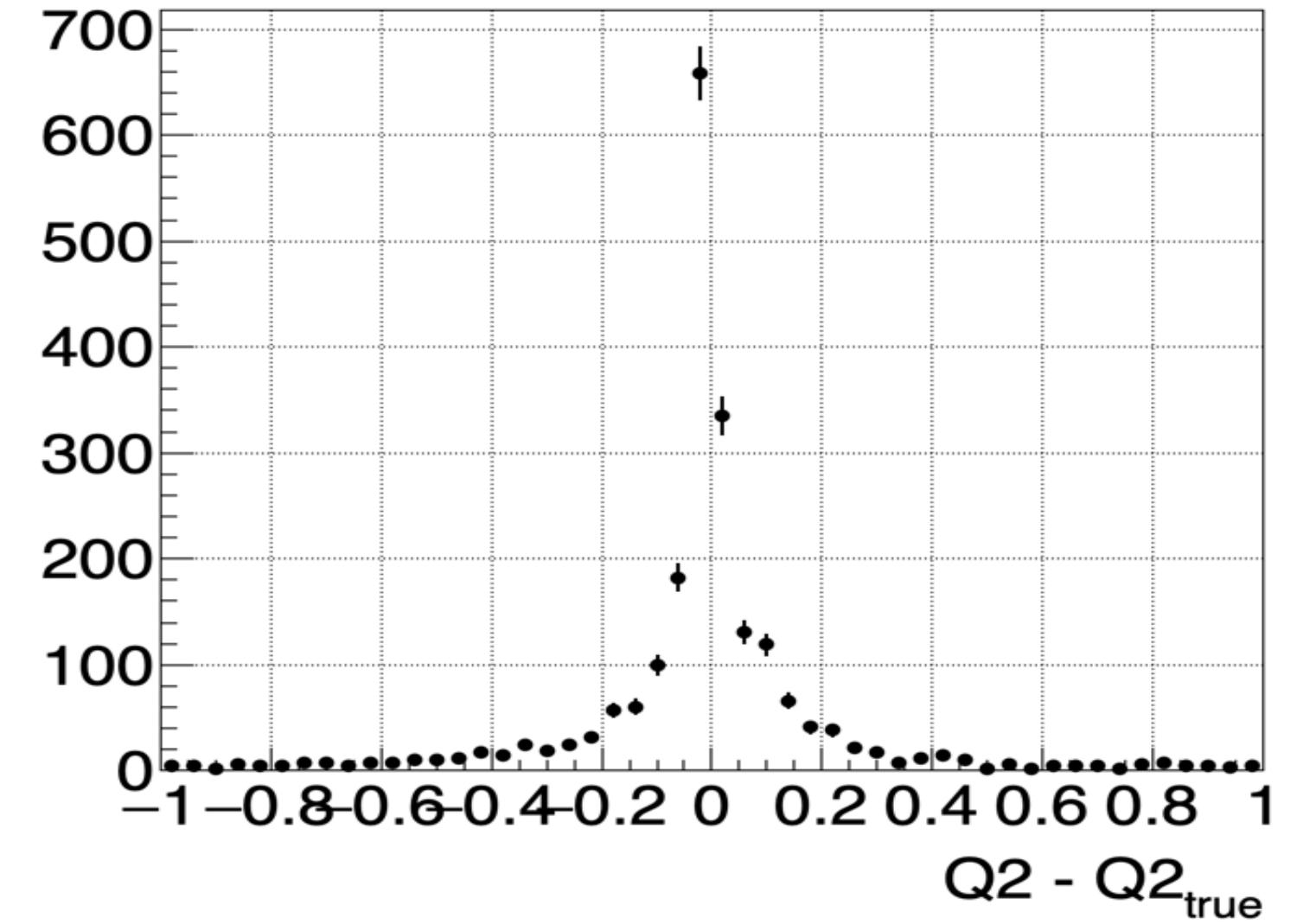
18X275 : Full

Q2 - Q2_{true} distribution, π^+ tracks, $0.75 < p_T < 1.50$, full x, full z, full Q2, full y



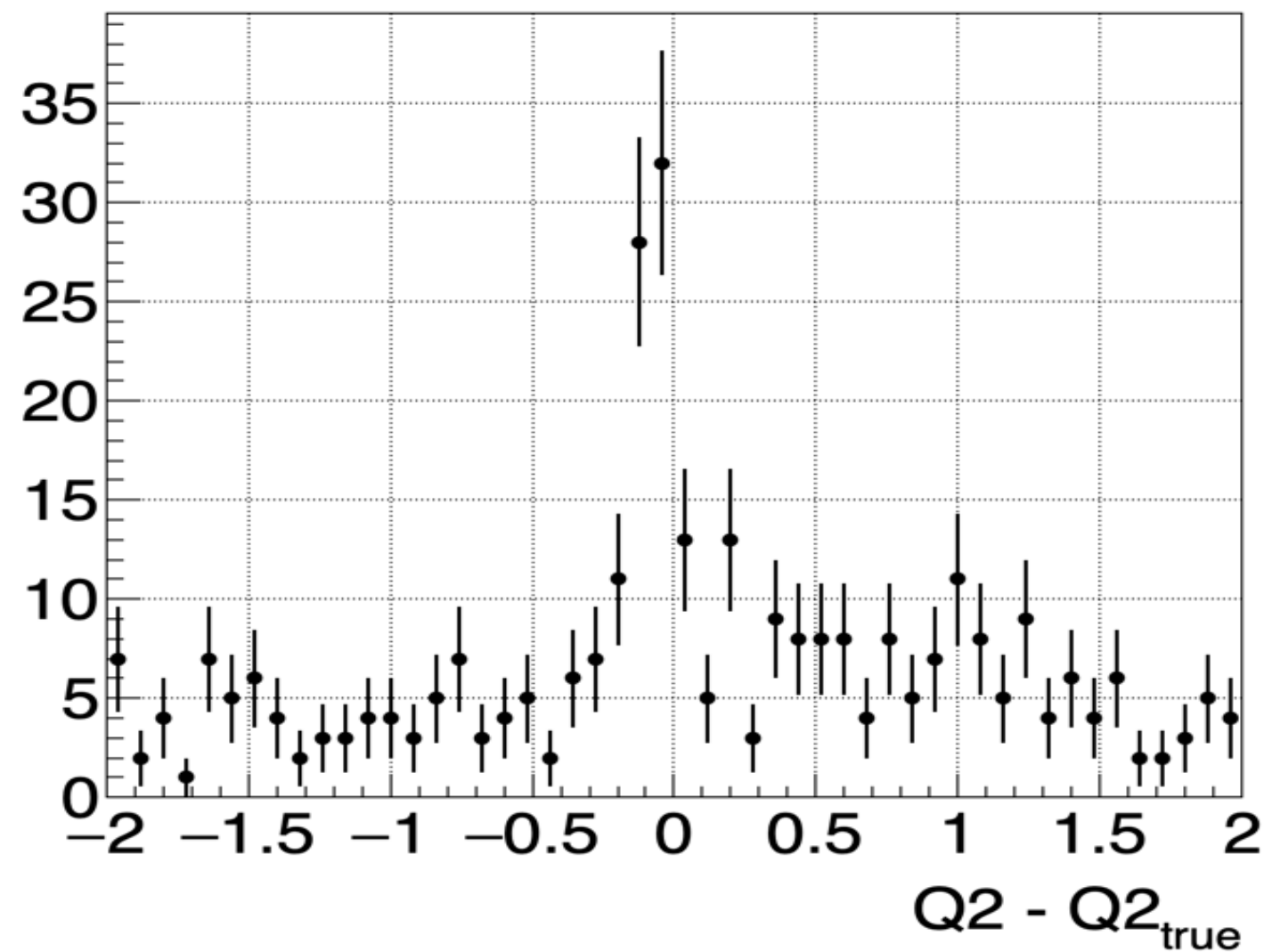
5X41 : Delphes

Q2 - Q2_{true} distribution, π^+ tracks, $0.75 < p_T < 1.50$, full x, full z, full Q2, full y

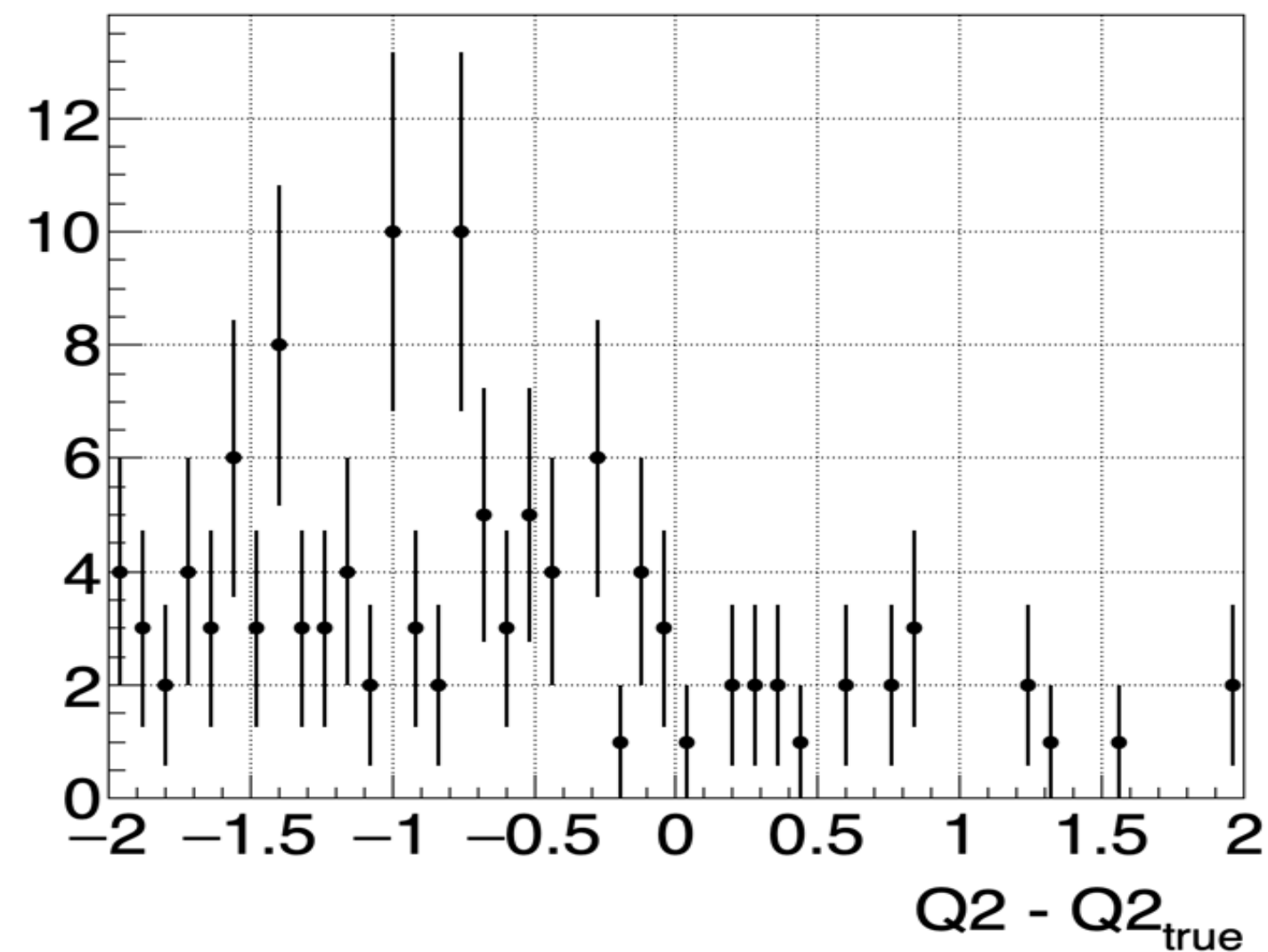


$p_T : 1.50 - 2.25$

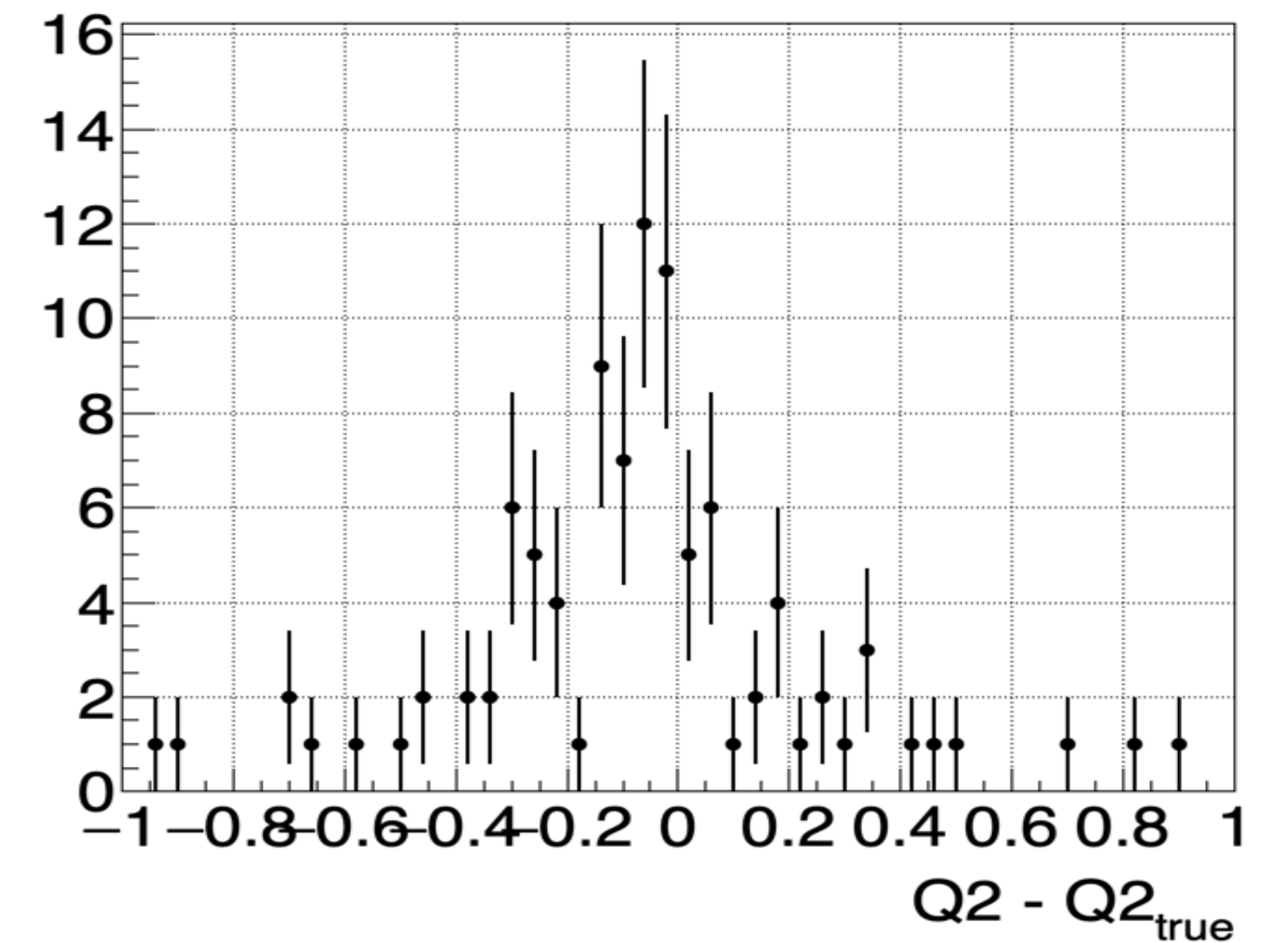
Q2 - Q2_{true} distribution, π^+ tracks, $1.50 < p_T < 2.25$, full x, full z, full Q2, full y



Q2 - Q2_{true} distribution, π^+ tracks, $1.50 < p_T < 2.25$, full x, full z, full Q2, full y



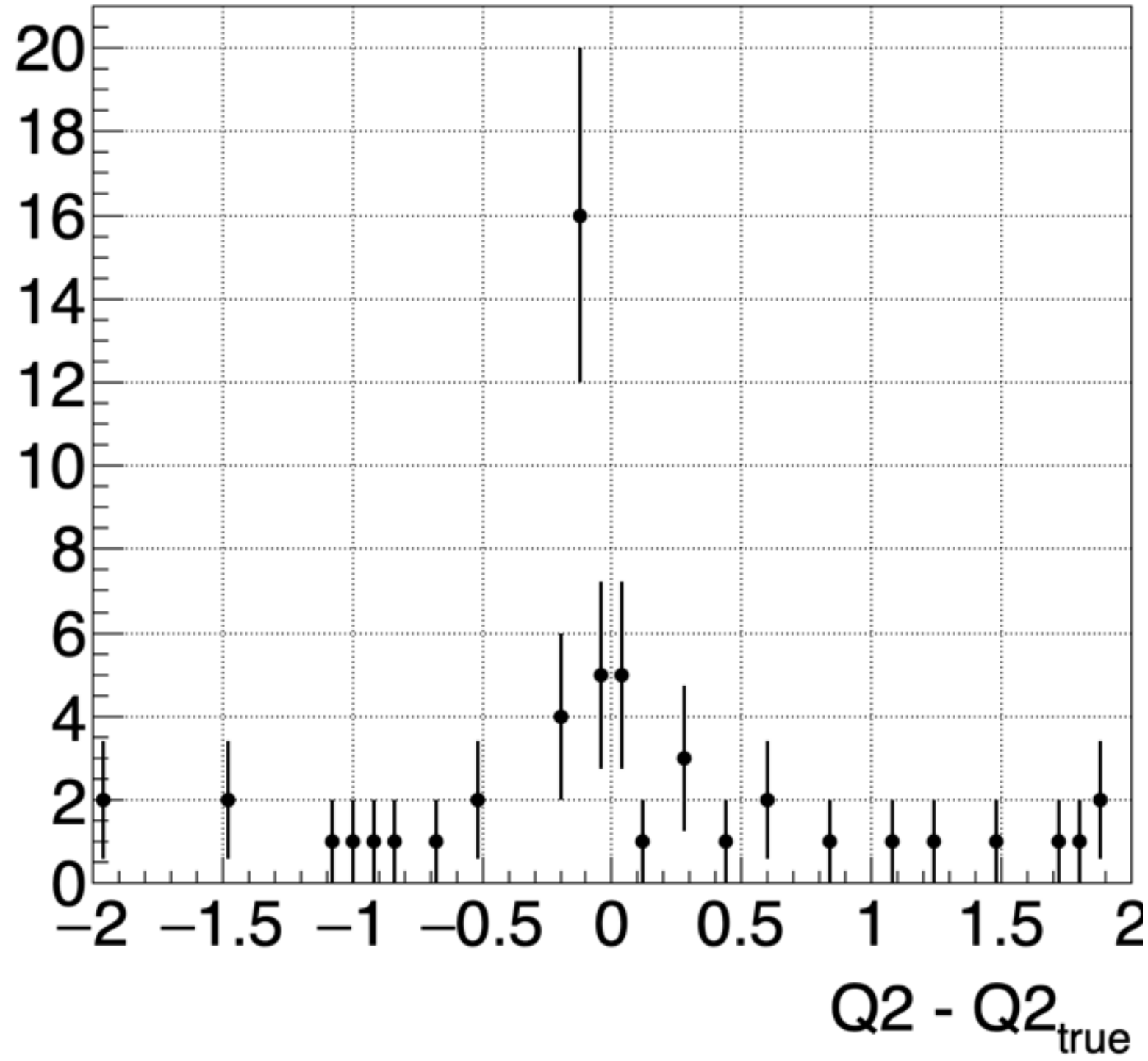
Q2 - Q2_{true} distribution, π^+ tracks, $1.50 < p_T < 2.25$, full x, full z, full Q2, full y



$p_T : 2.25 - 3.00$

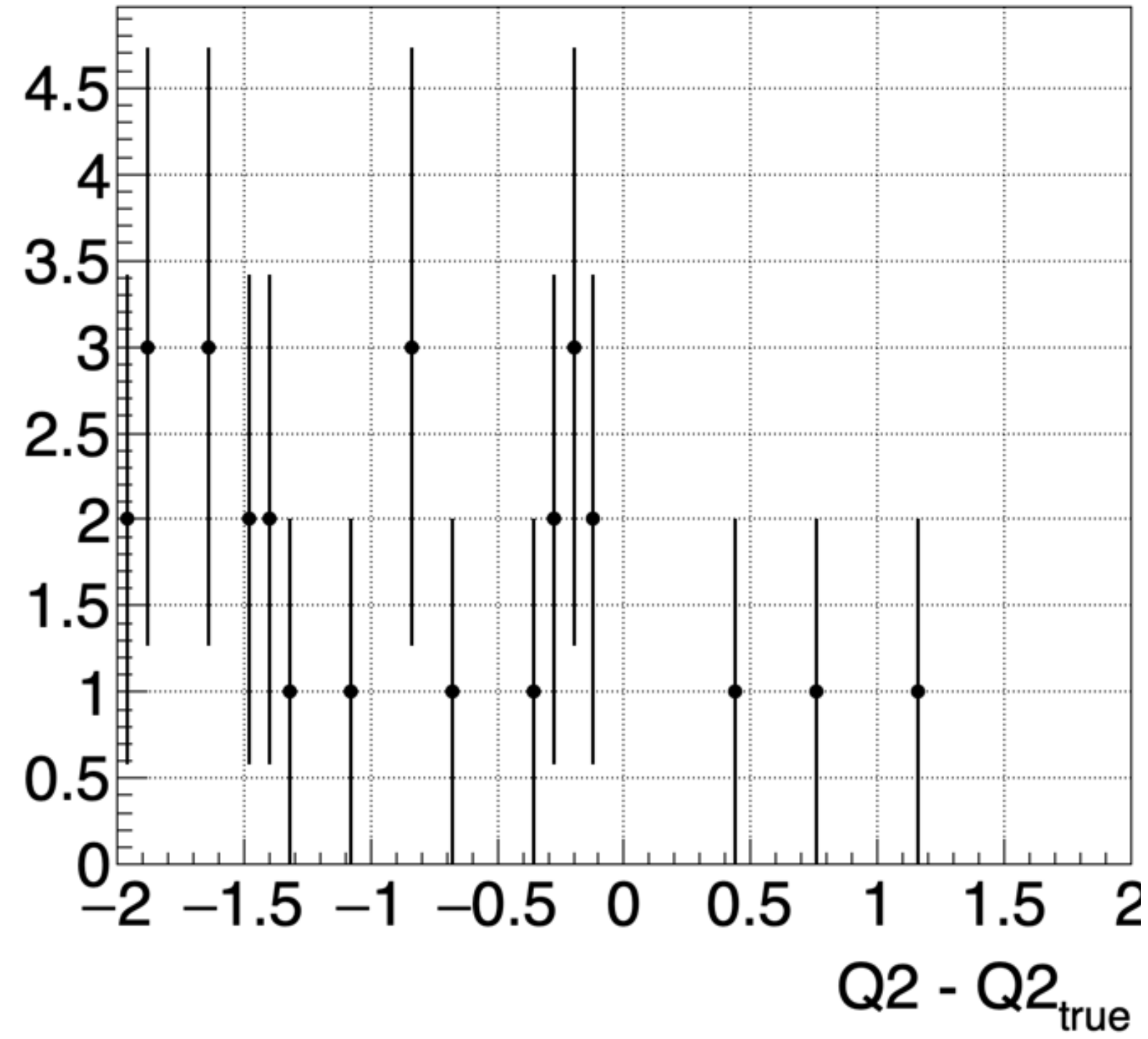
5X41 : Full

Q2 - Q2_{true} distribution, π^+ tracks, $2.25 < p_T < 3.00$, full x, full z, full Q2, full y



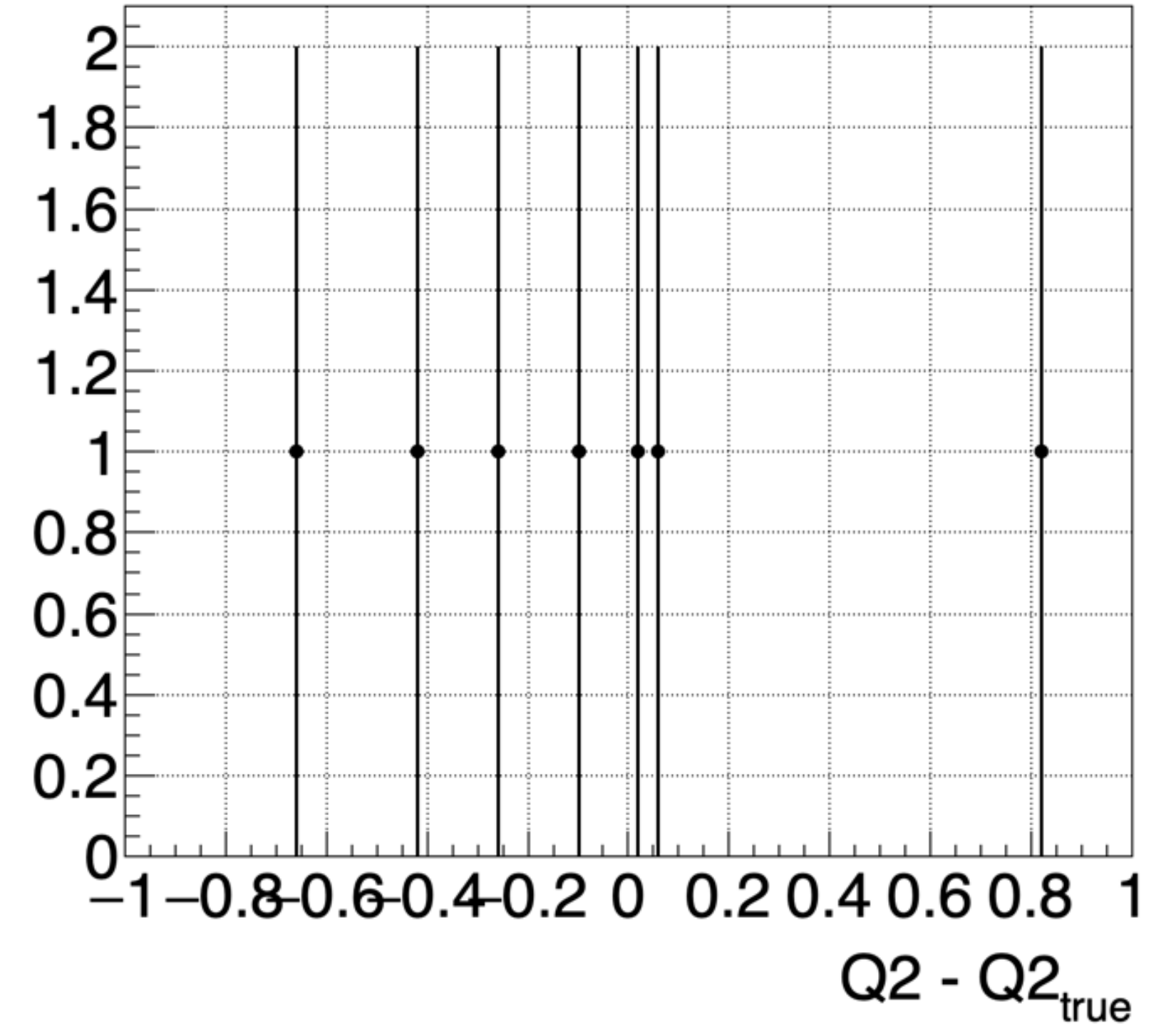
18X275 : Full

Q2 - Q2_{true} distribution, π^+ tracks, $2.25 < p_T < 3.00$, full x, full z, full Q2, full y



5X41 : Delphes

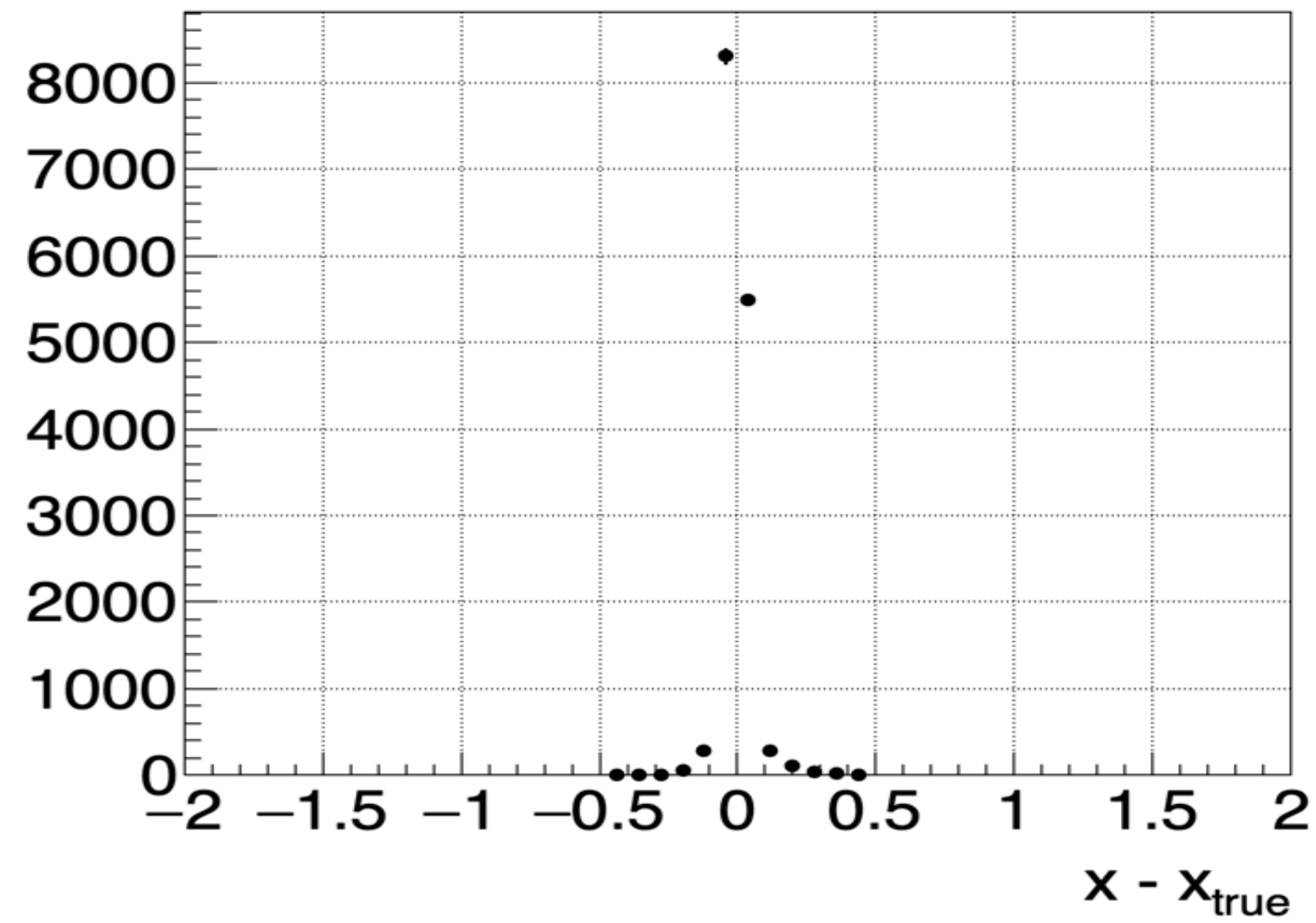
Q2 - Q2_{true} distribution, π^+ tracks, $2.25 < p_T < 3.00$, full x, full z, full Q2, full y



x-Resolution($x - x_{TRUE}$)

5X41 : Full

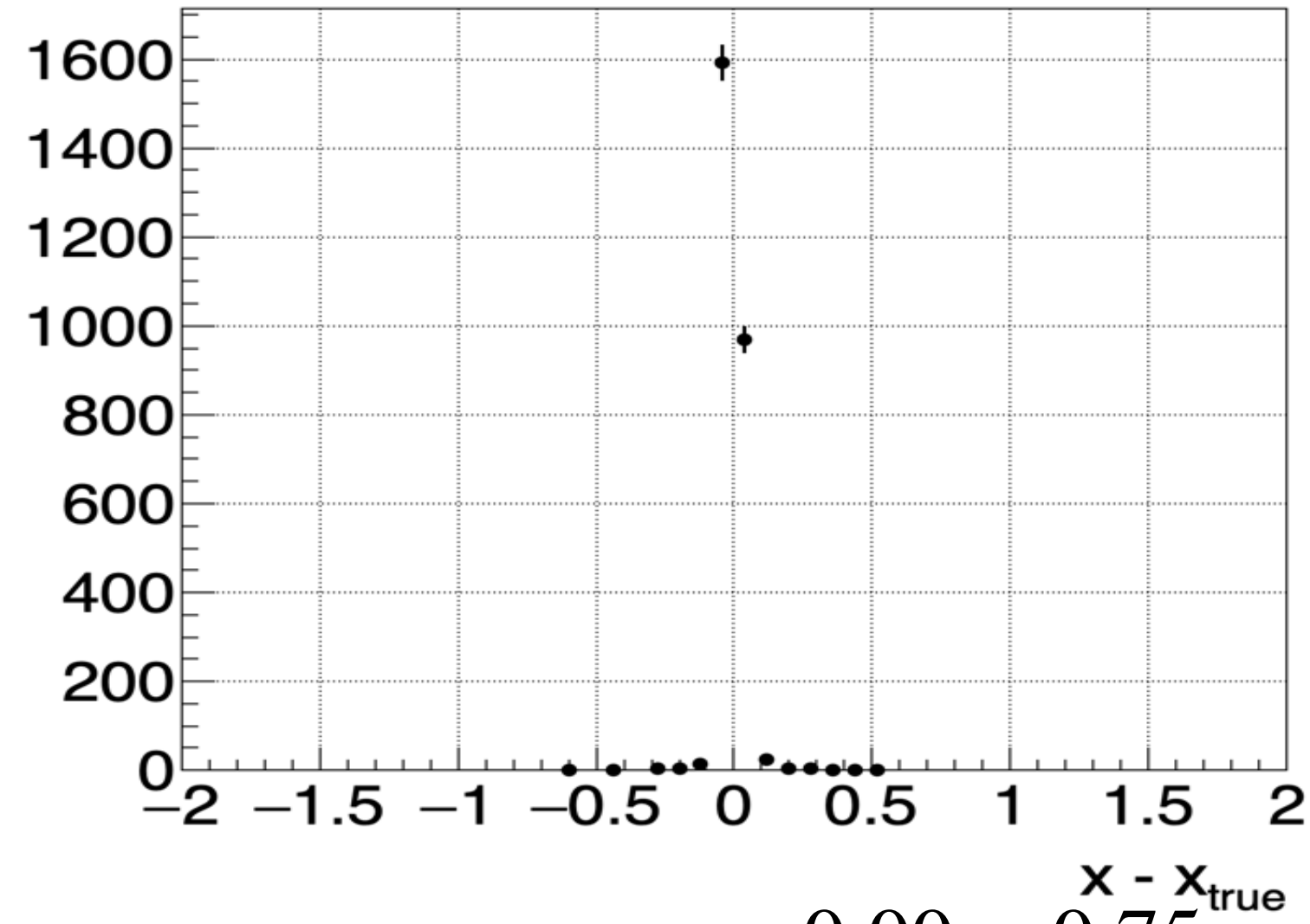
x - x_{true} distribution, π^+ tracks, full p_T , full x, full z, full Q2, full y



$p_T : 0.00 - 3.00$

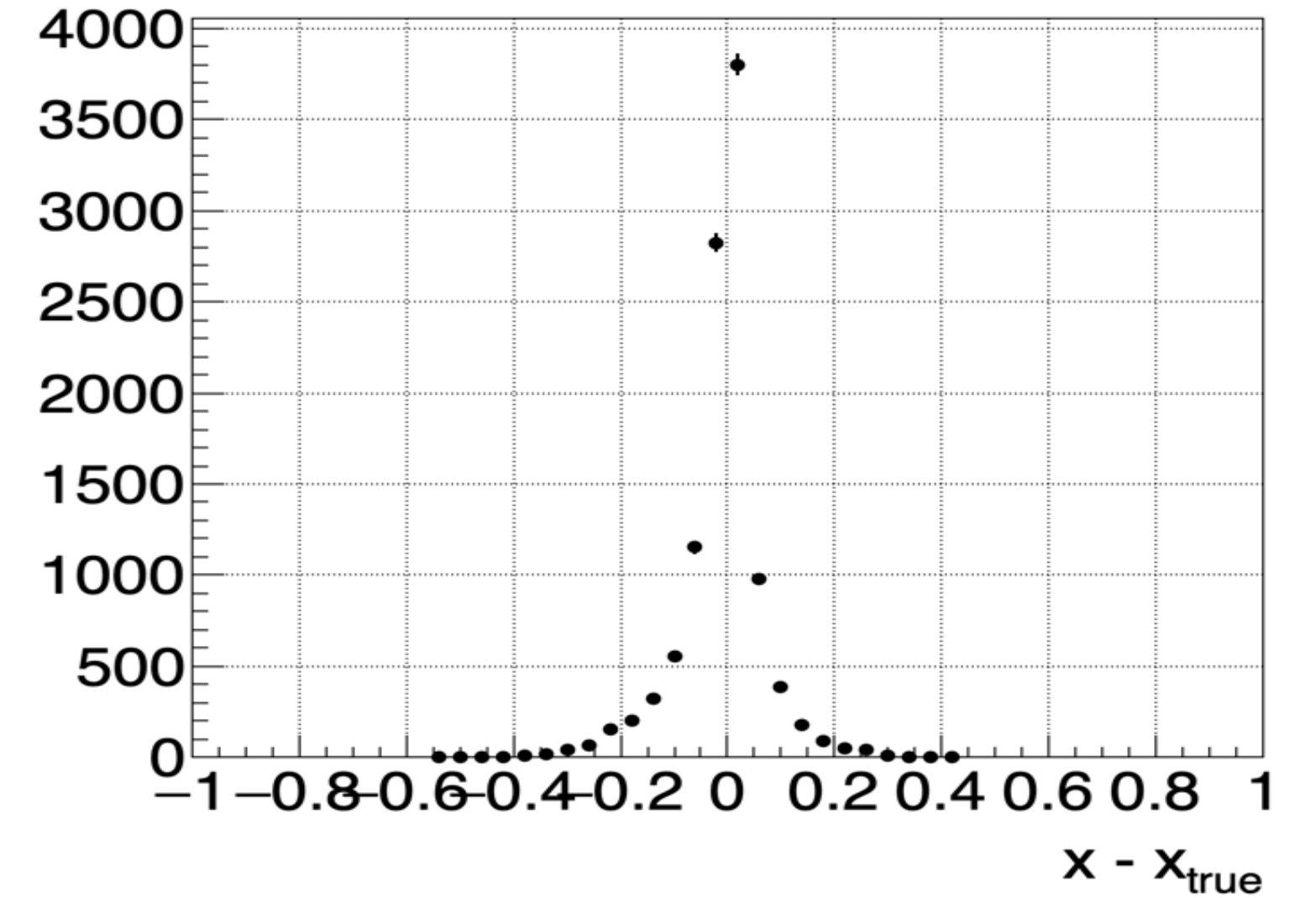
18X275 : Full

x - x_{true} distribution, π^+ tracks, full p_T , full x, full z, full Q2, full y

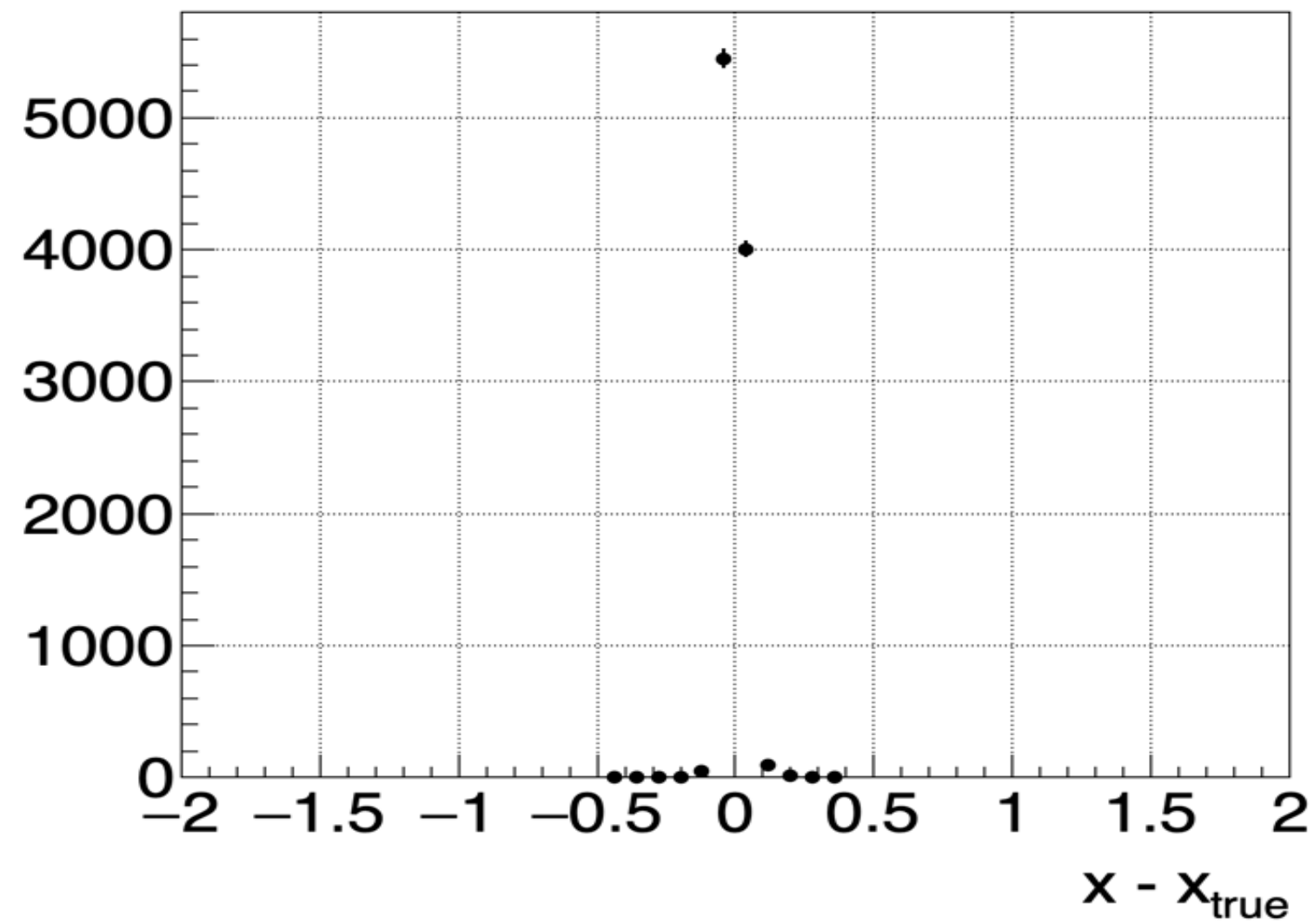


5X41 : Delphes

x - x_{true} distribution, π^+ tracks, full p_T , full x, full z, full Q2, full y

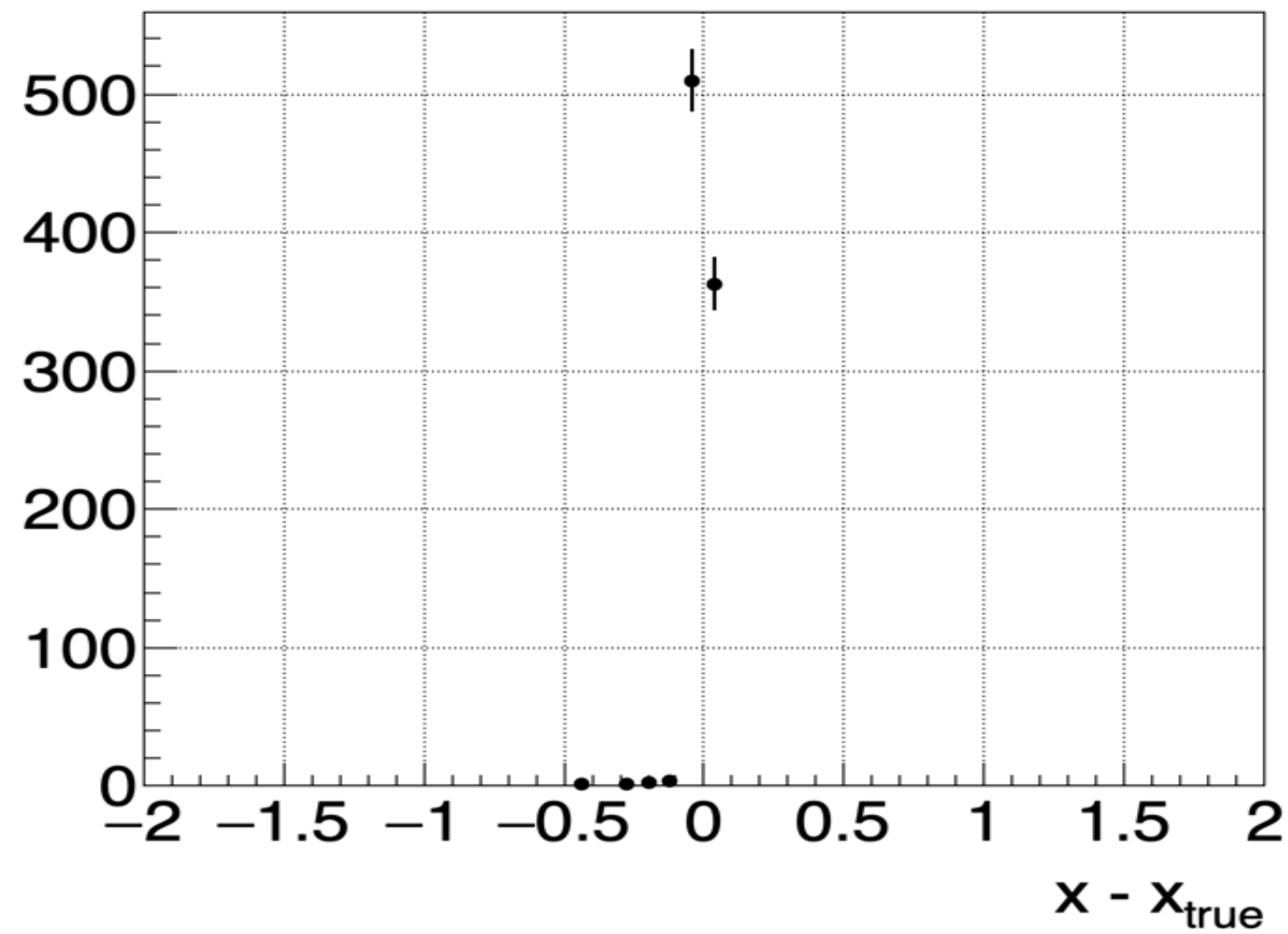


x - x_{true} distribution, π^+ tracks, $0.00 < p_T < 0.75$, full x, full z, full Q2, full y

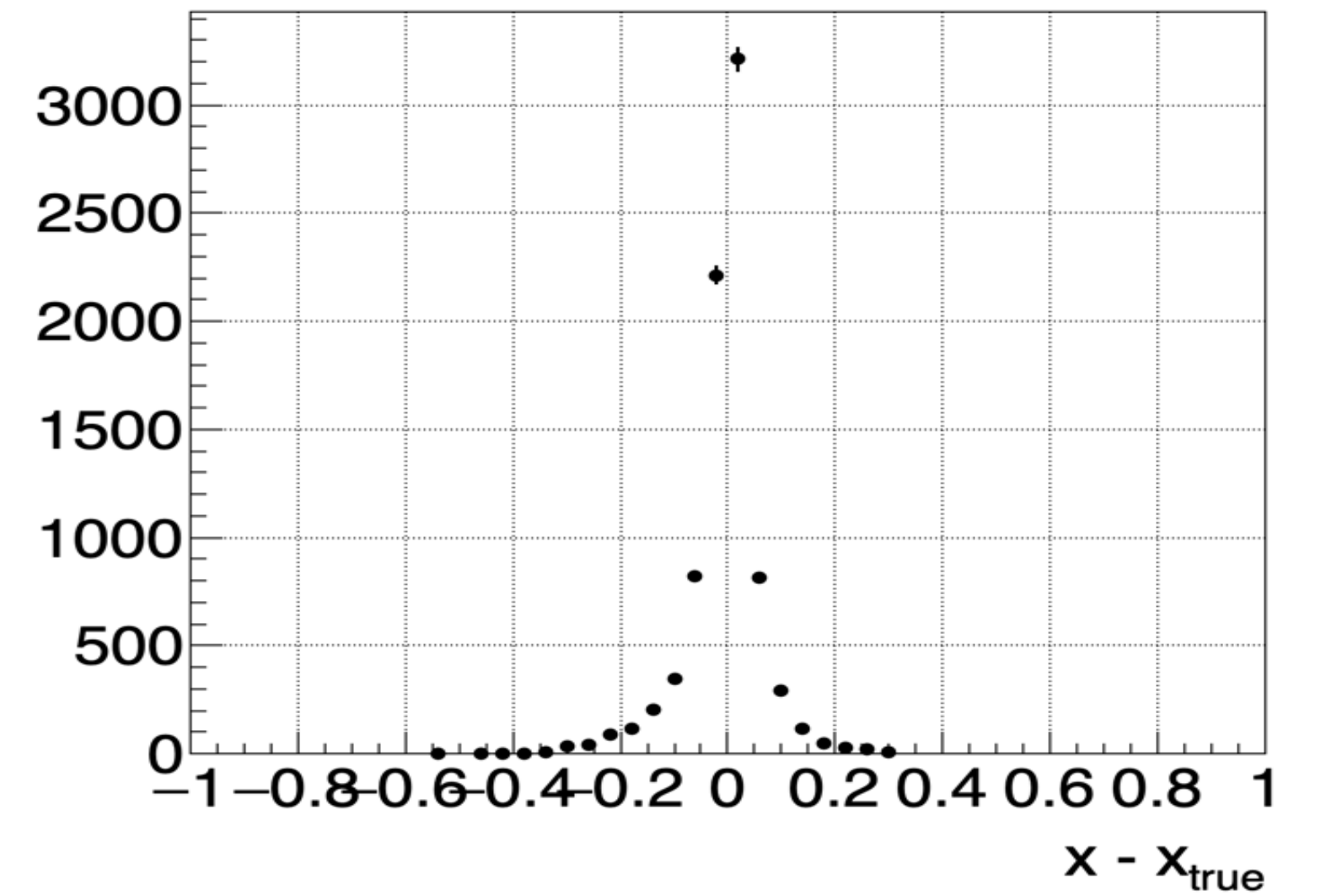


$p_T : 0.00 - 0.75$

x - x_{true} distribution, π^+ tracks, $0.00 < p_T < 0.75$, full x, full z, full Q2, full y



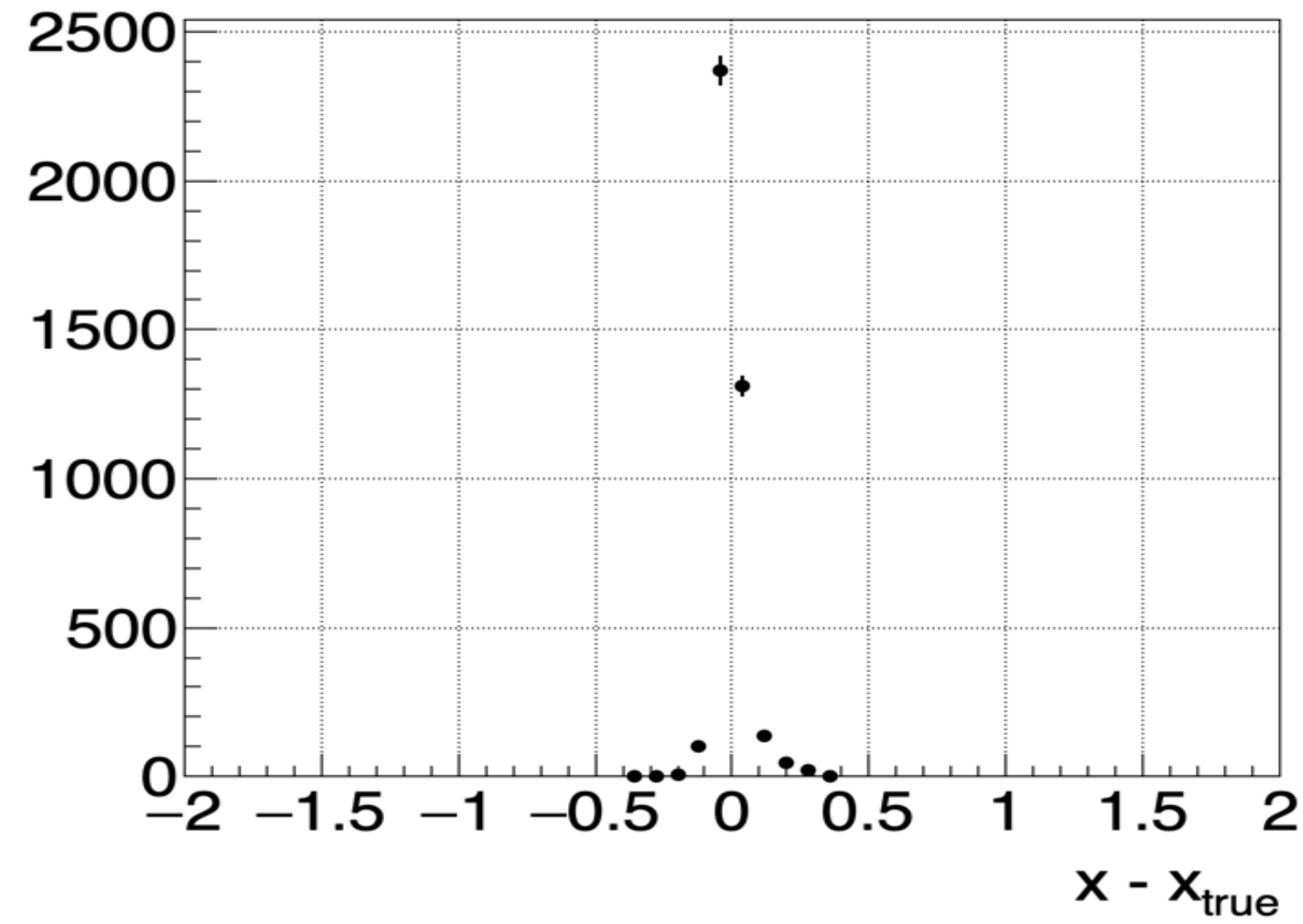
x - x_{true} distribution, π^+ tracks, $0.00 < p_T < 0.75$, full x, full z, full Q2, full y



$p_T : 0.75 - 1.50$

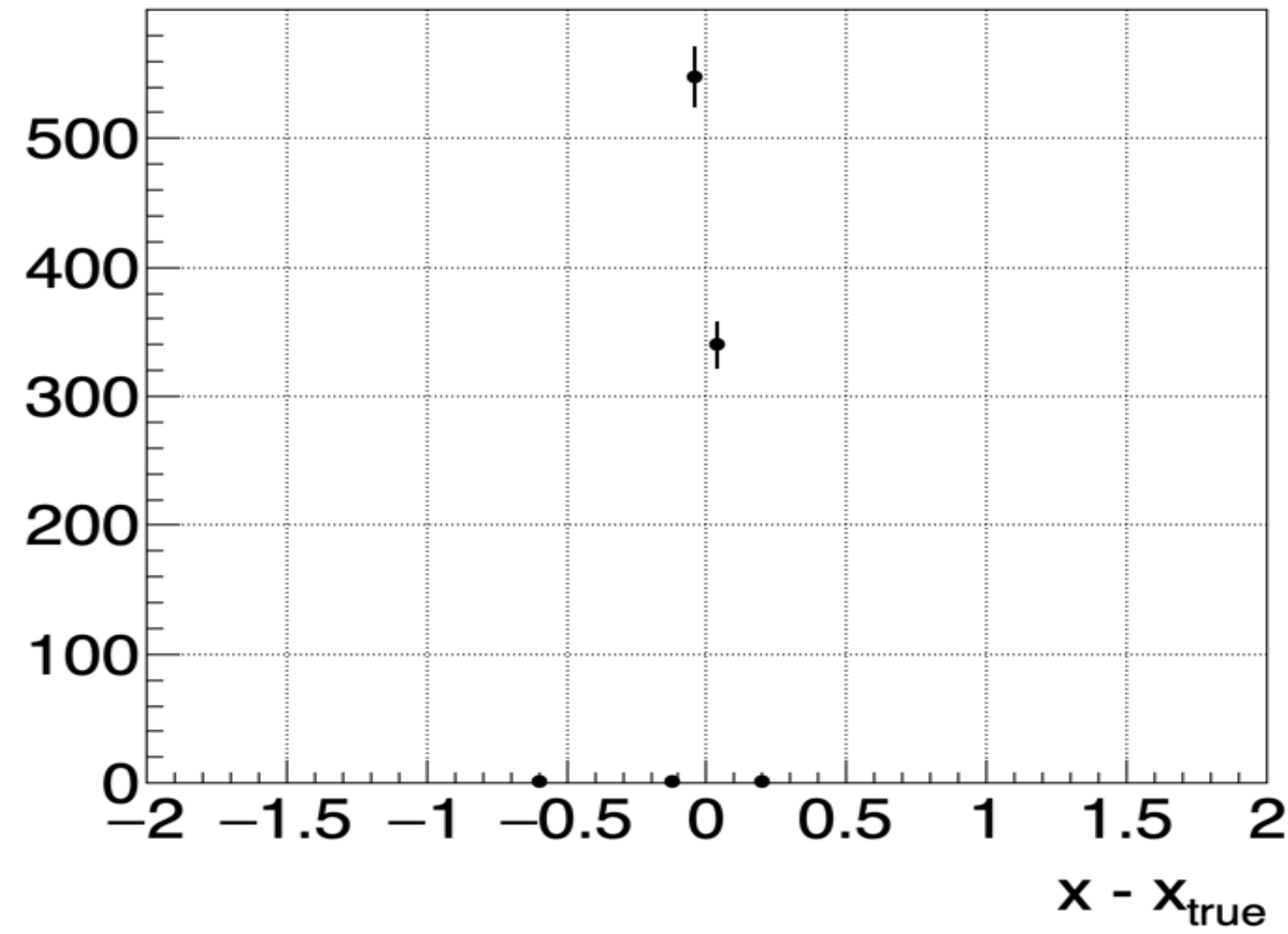
5X41 : Full

x - x_{true} distribution, π^+ tracks, $0.75 < p_T < 1.50$, full x, full z, full Q2, full y



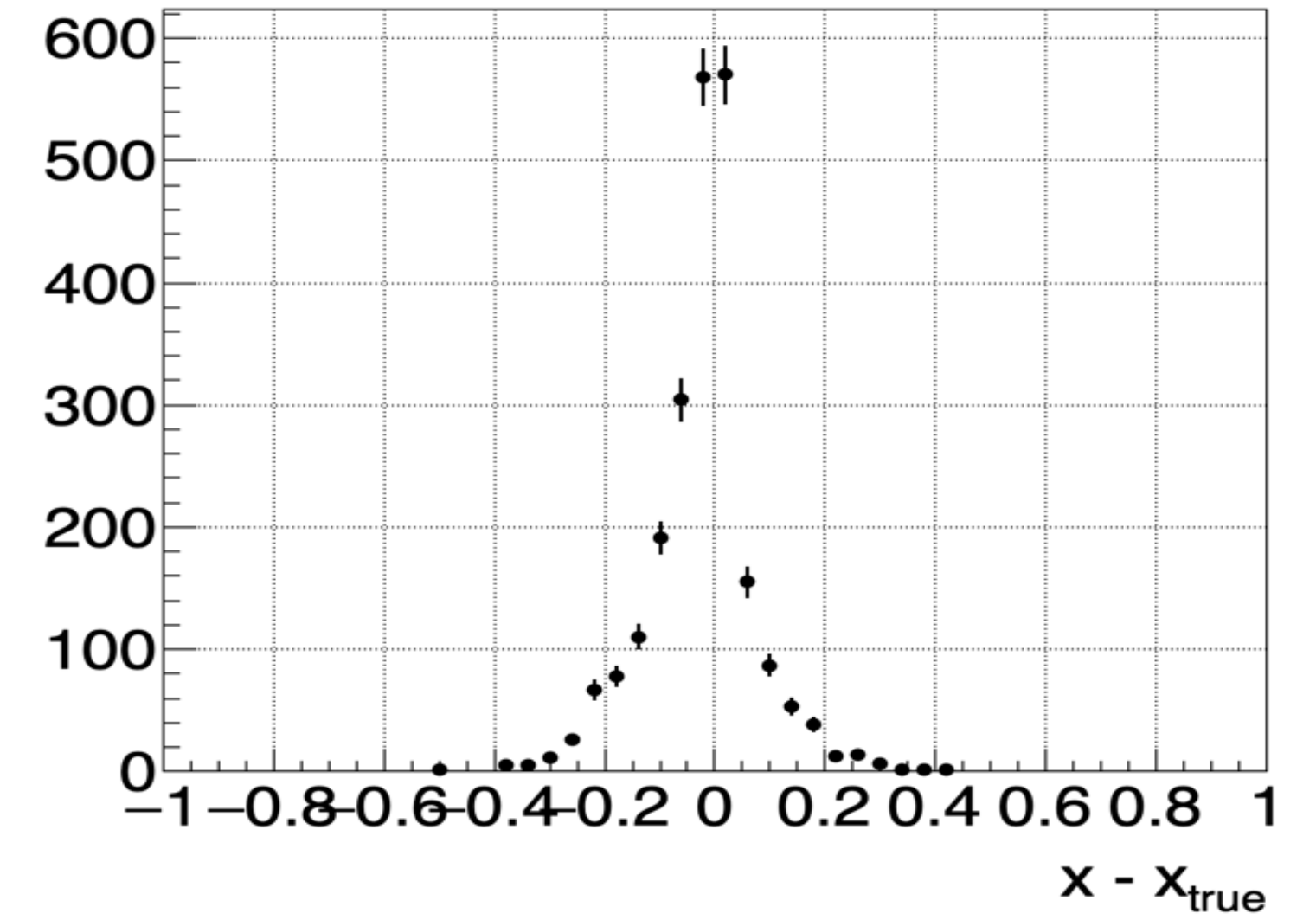
18X275 : Full

x - x_{true} distribution, π^+ tracks, $0.75 < p_T < 1.50$, full x, full z, full Q2, full y



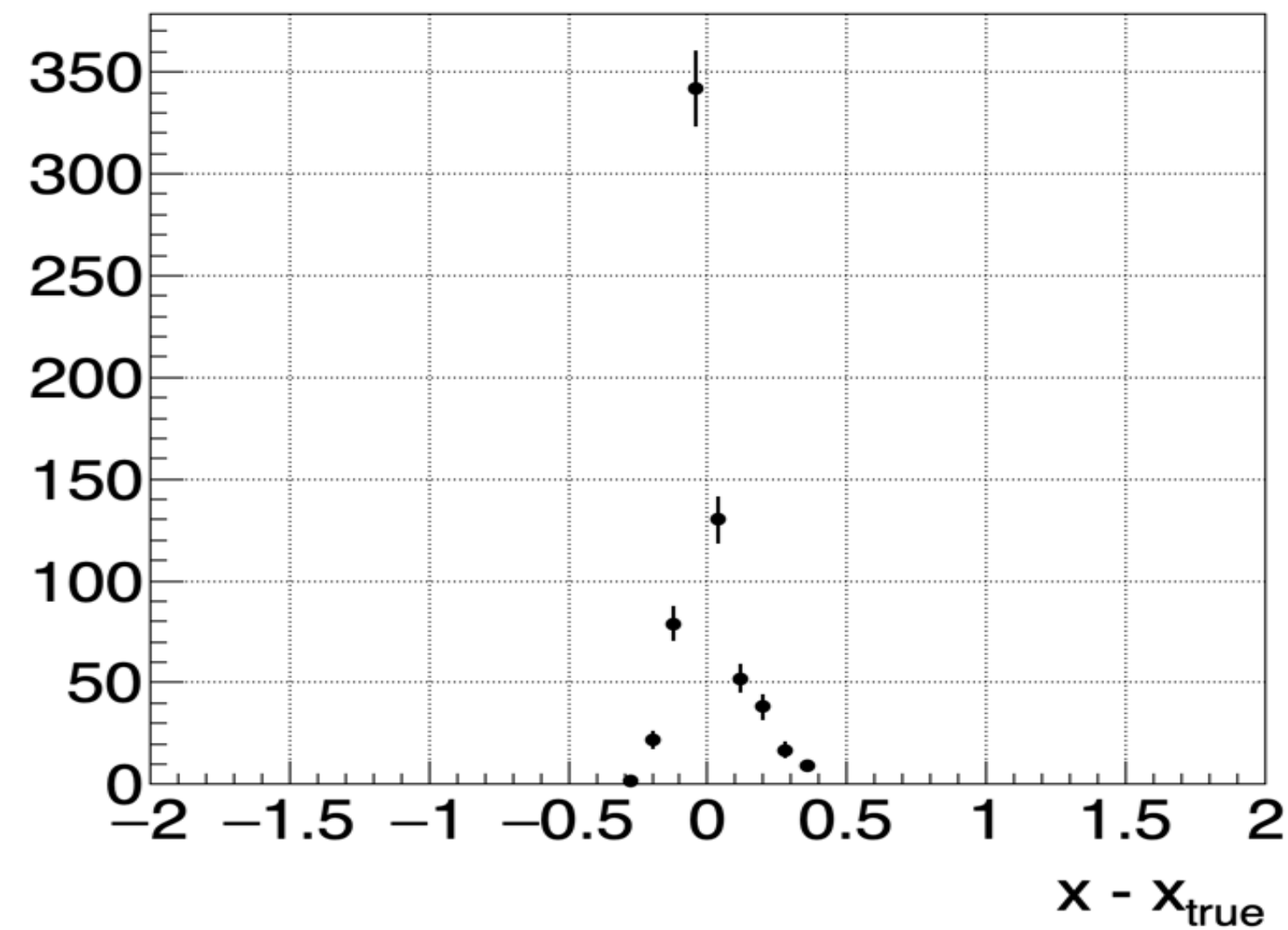
5X41 : Delphes

x - x_{true} distribution, π^+ tracks, $0.75 < p_T < 1.50$, full x, full z, full Q2, full y

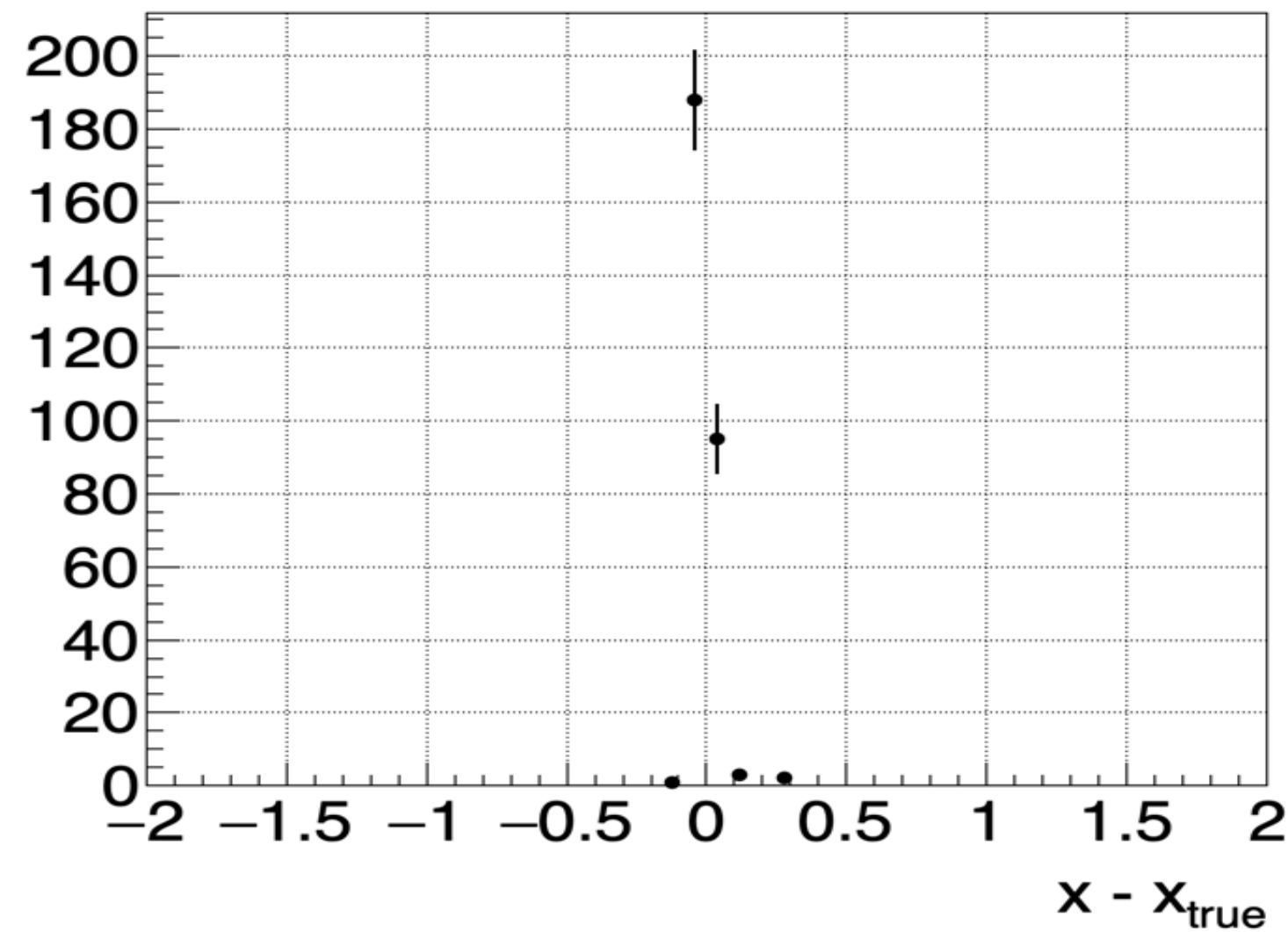


$p_T : 1.50 - 2.25$

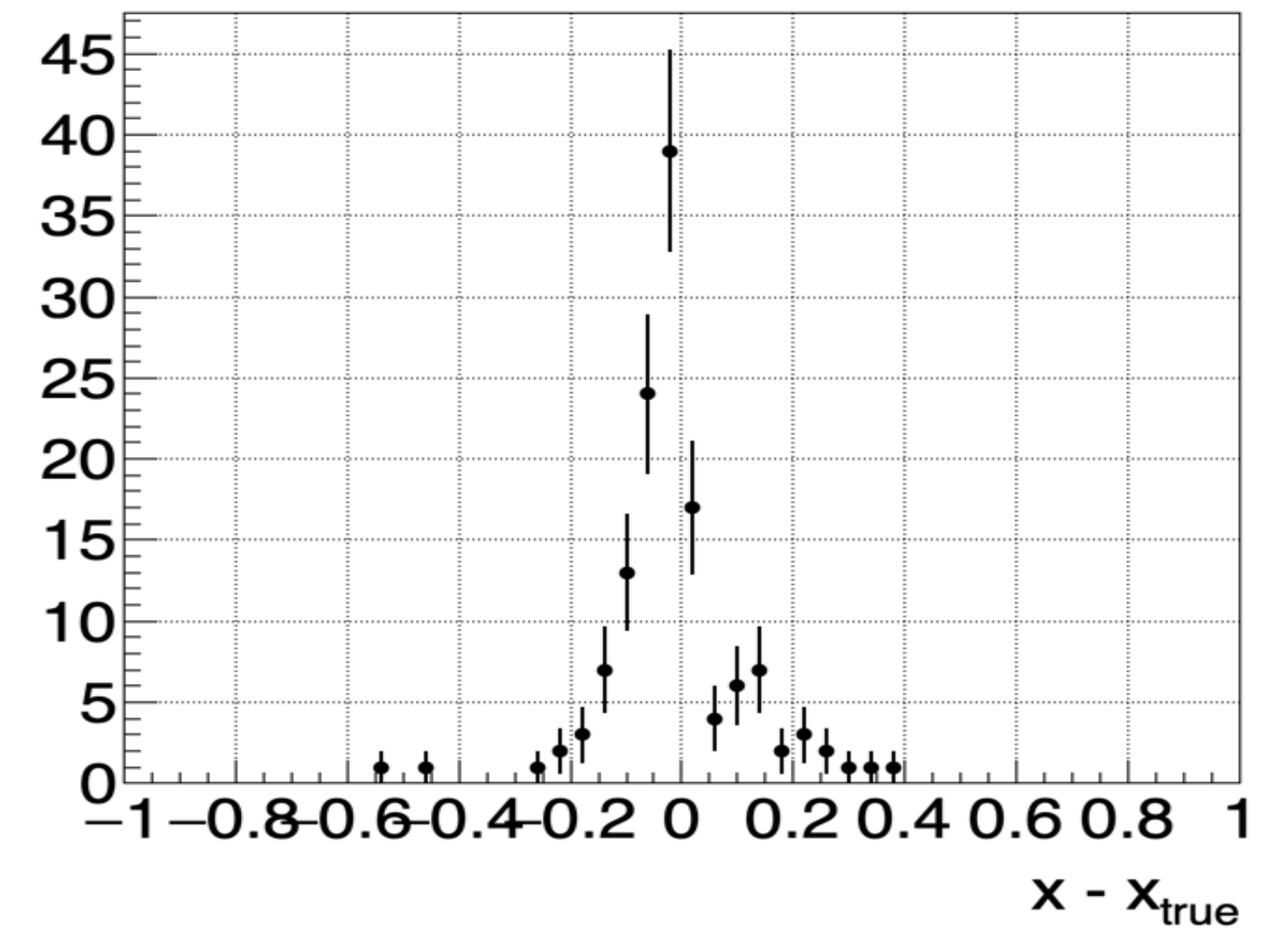
x - x_{true} distribution, π^+ tracks, $1.50 < p_T < 2.25$, full x, full z, full Q2, full y



x - x_{true} distribution, π^+ tracks, $1.50 < p_T < 2.25$, full x, full z, full Q2, full y



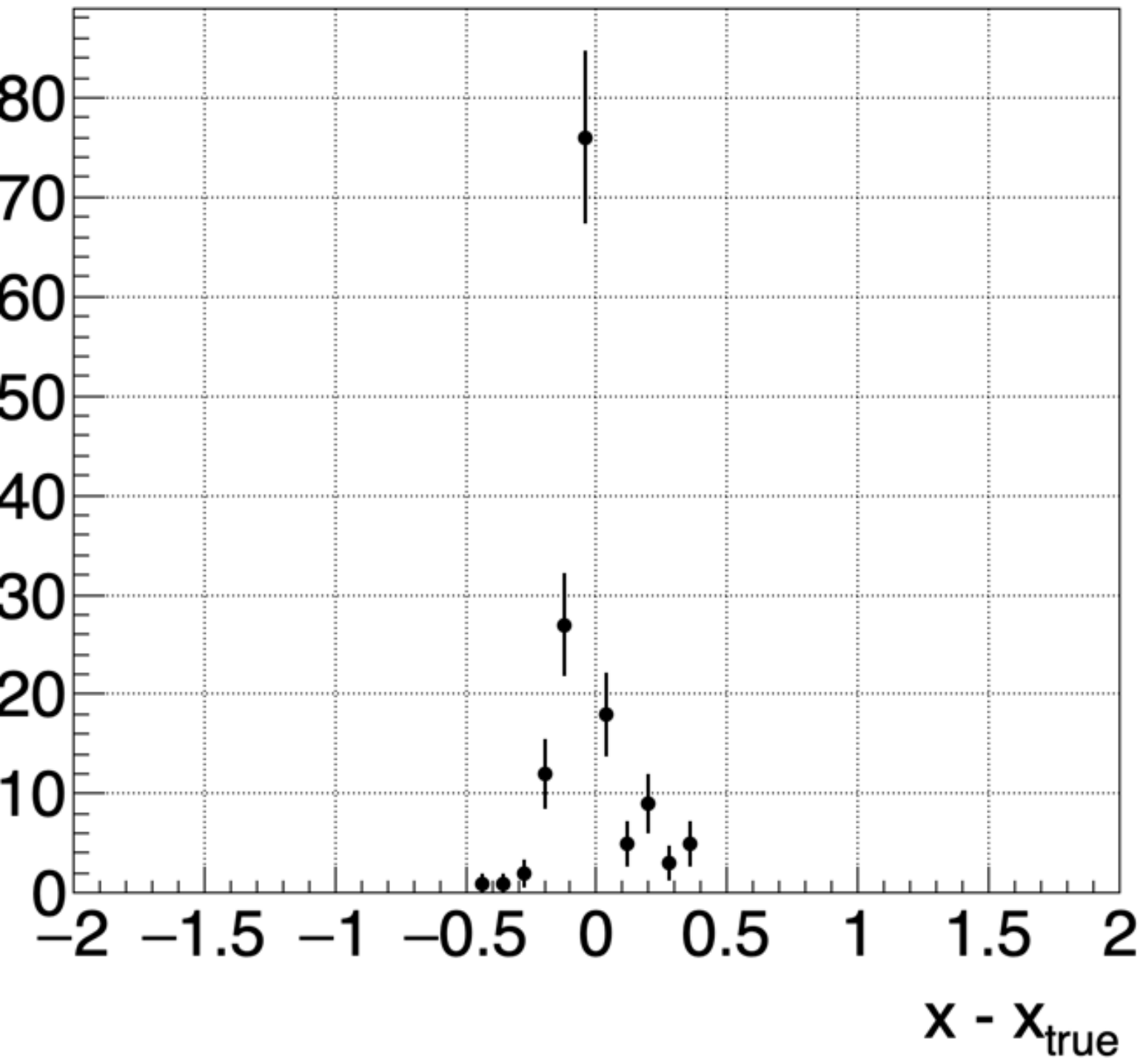
x - x_{true} distribution, π^+ tracks, $1.50 < p_T < 2.25$, full x, full z, full Q2, full y



$p_T : 2.25 - 3.00$

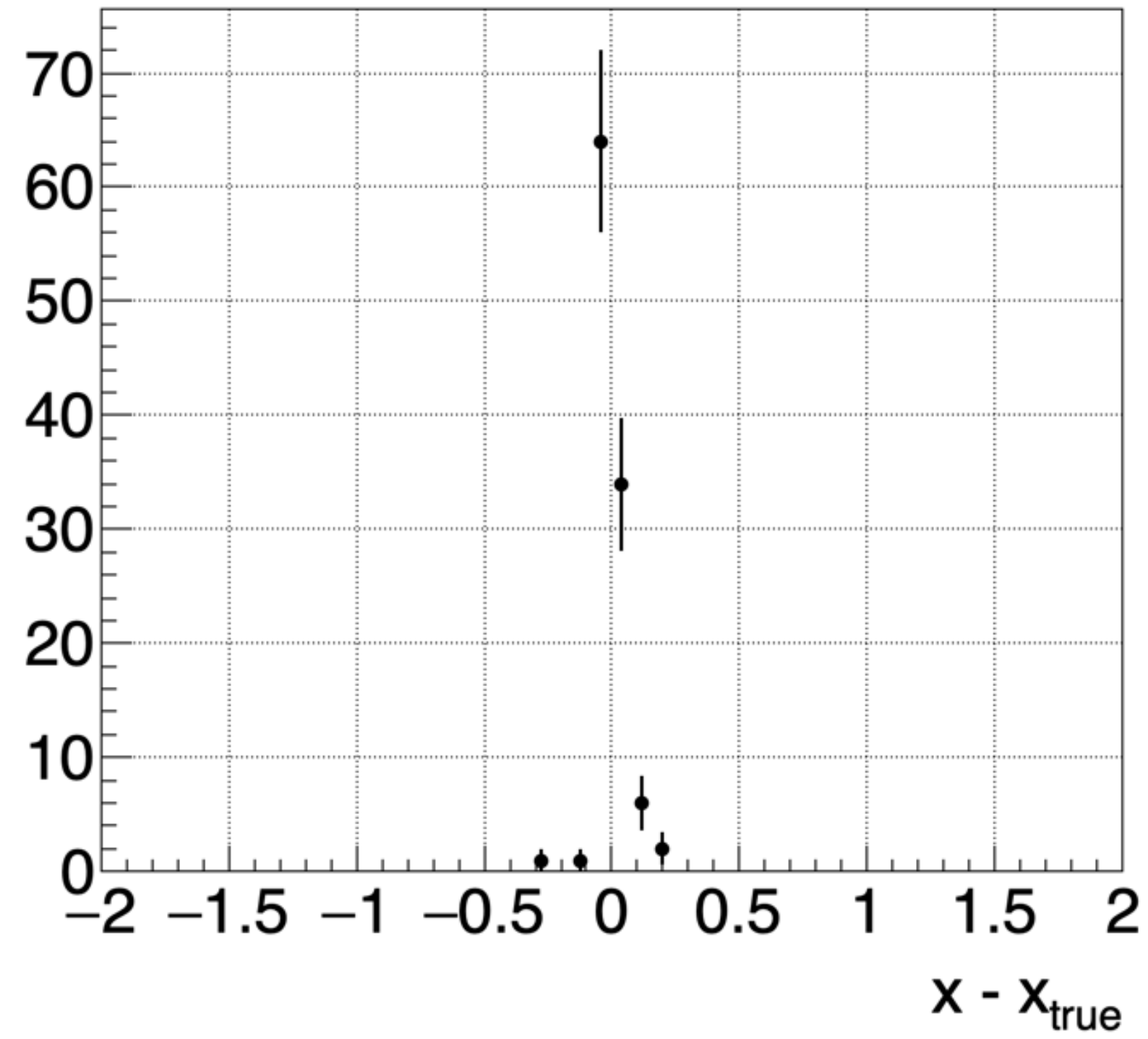
5X41 : Full

x - x_{true} distribution, π^+ tracks, $2.25 < p_T < 3.00$, full x, full z, full Q2, full y



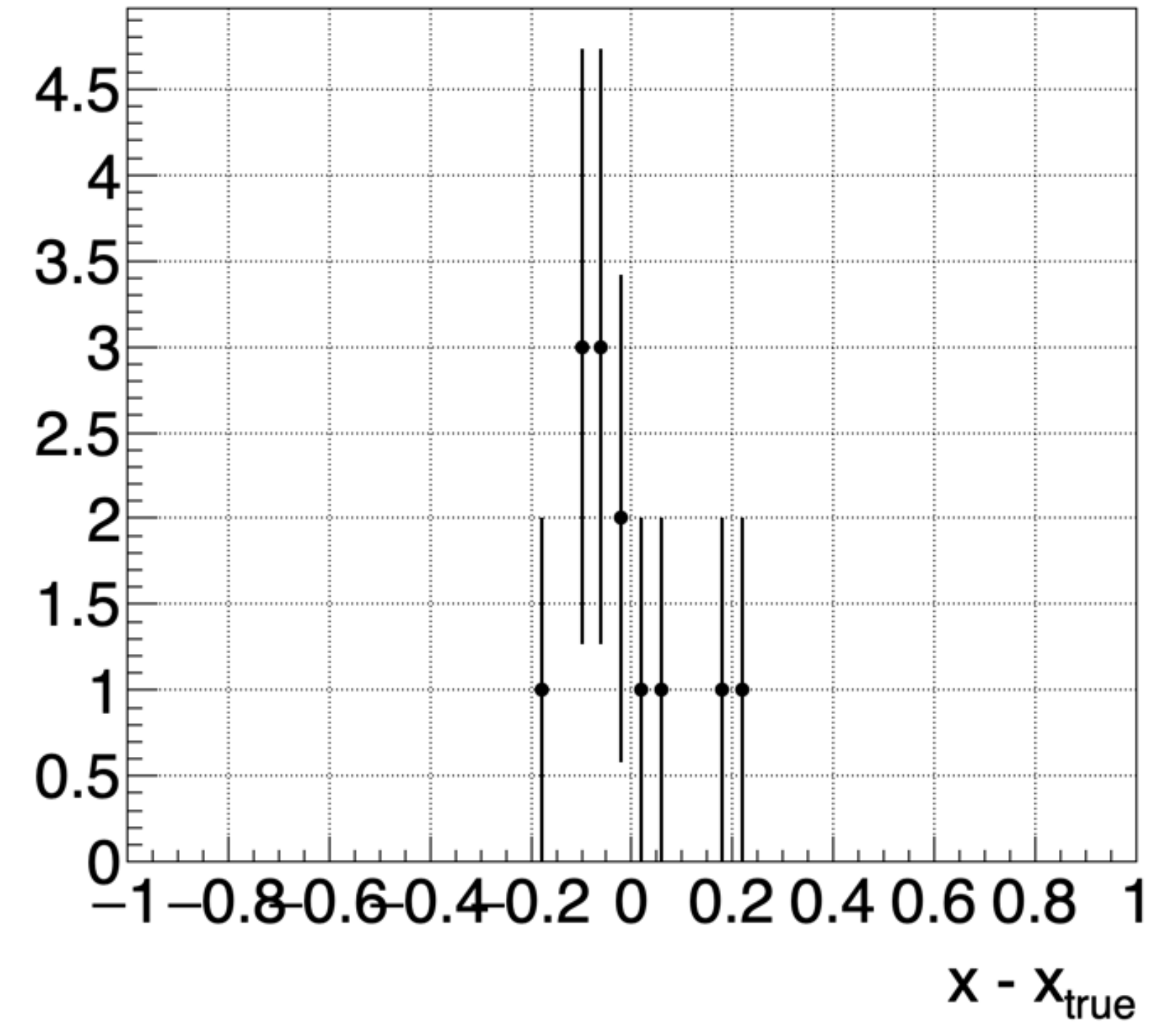
18X275 : Full

x - x_{true} distribution, π^+ tracks, $2.25 < p_T < 3.00$, full x, full z, full Q2, full y



5X41 : Delphes

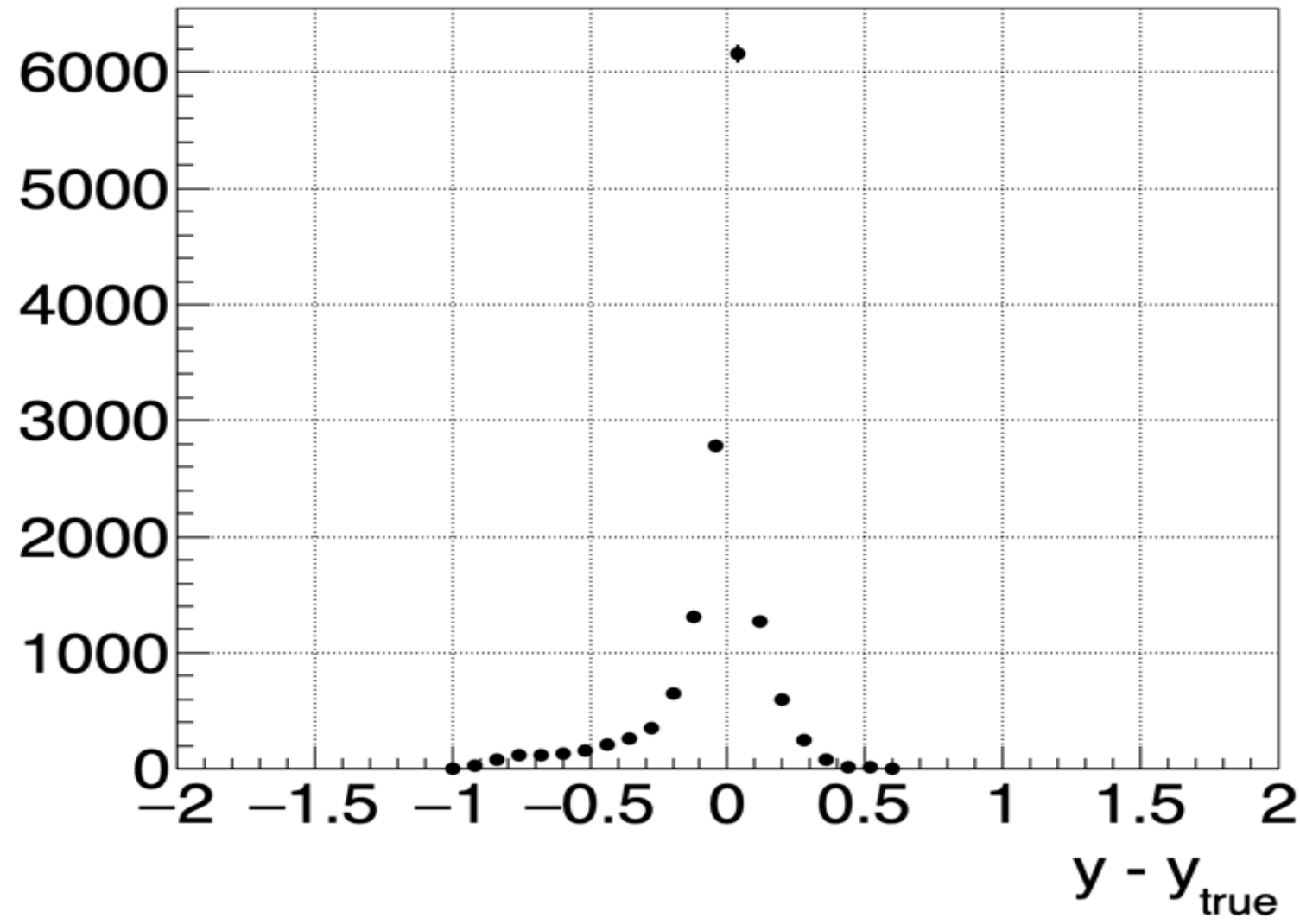
x - x_{true} distribution, π^+ tracks, $2.25 < p_T < 3.00$, full x, full z, full Q2, full y



y-Resolution ($y - y_{TRUE}$)

5X41 : Full

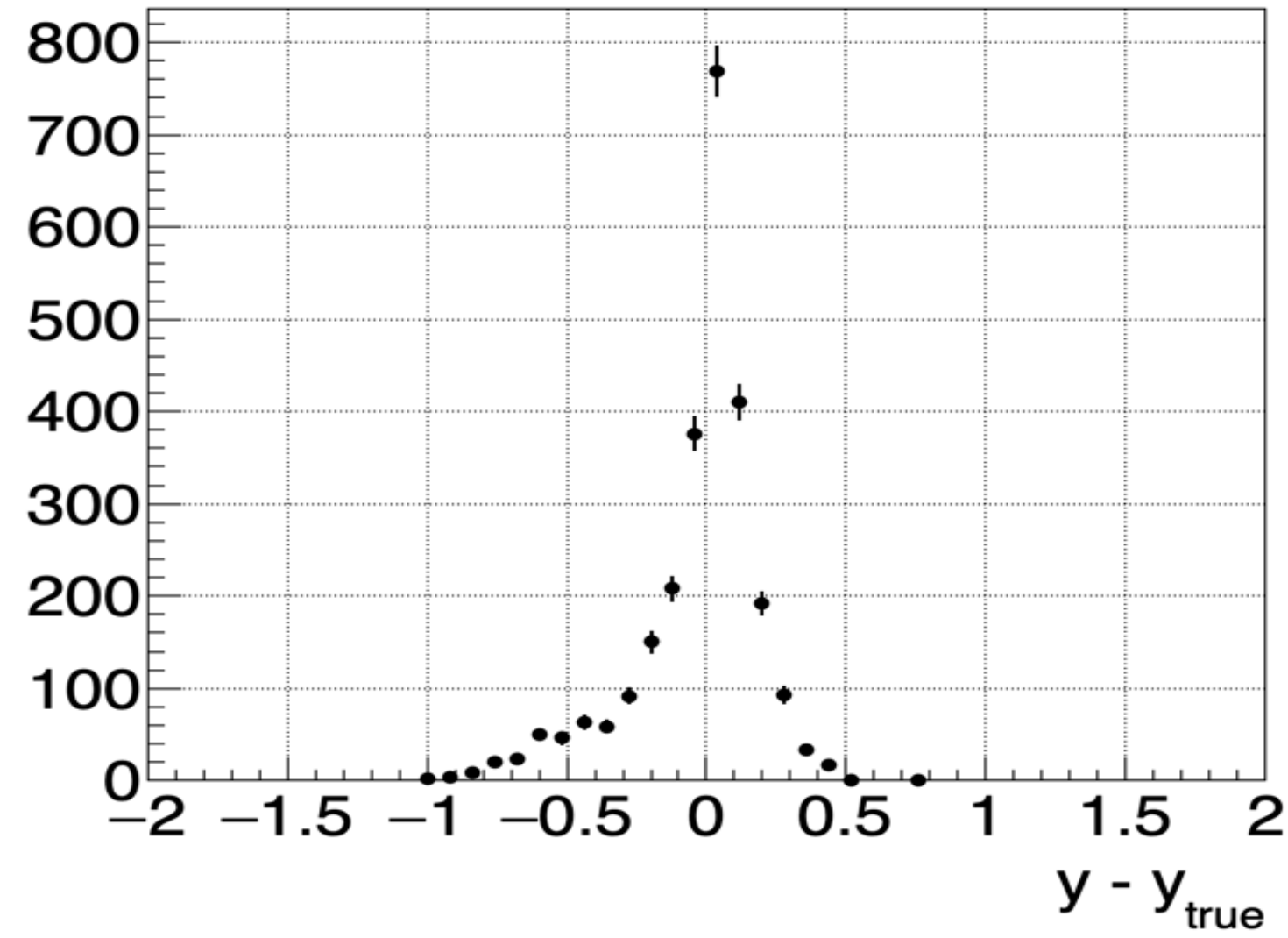
y - y_{true} distribution, π^+ tracks, full p_T, full x, full z, full Q2, full y



$p_T : 0.00 - 3.00$

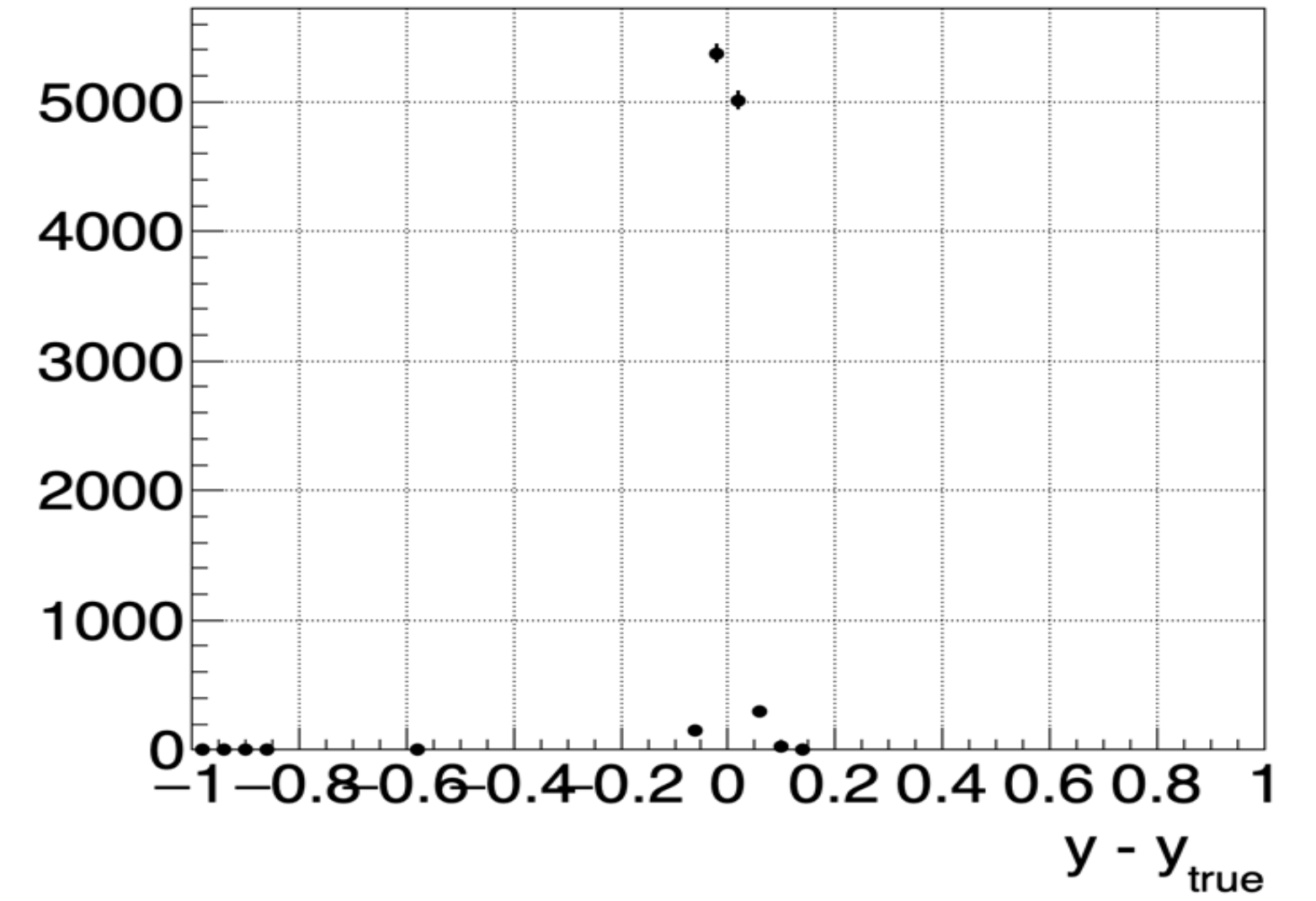
18X275 : Full

y - y_{true} distribution, π^+ tracks, full p_T, full x, full z, full Q2, full y



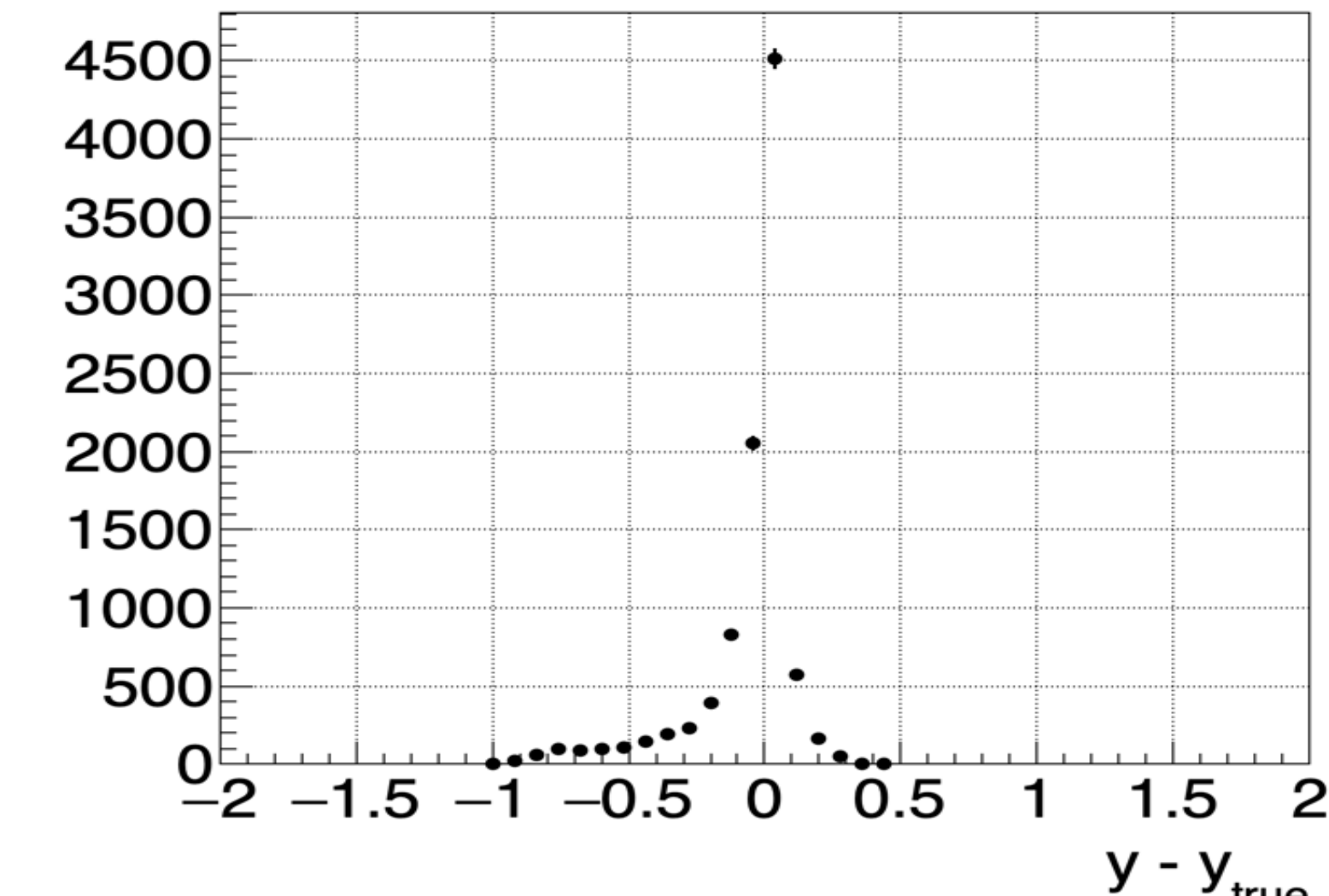
5X41 : Delphes

y - y_{true} distribution, π^+ tracks, full p_T, full x, full z, full Q2, full y

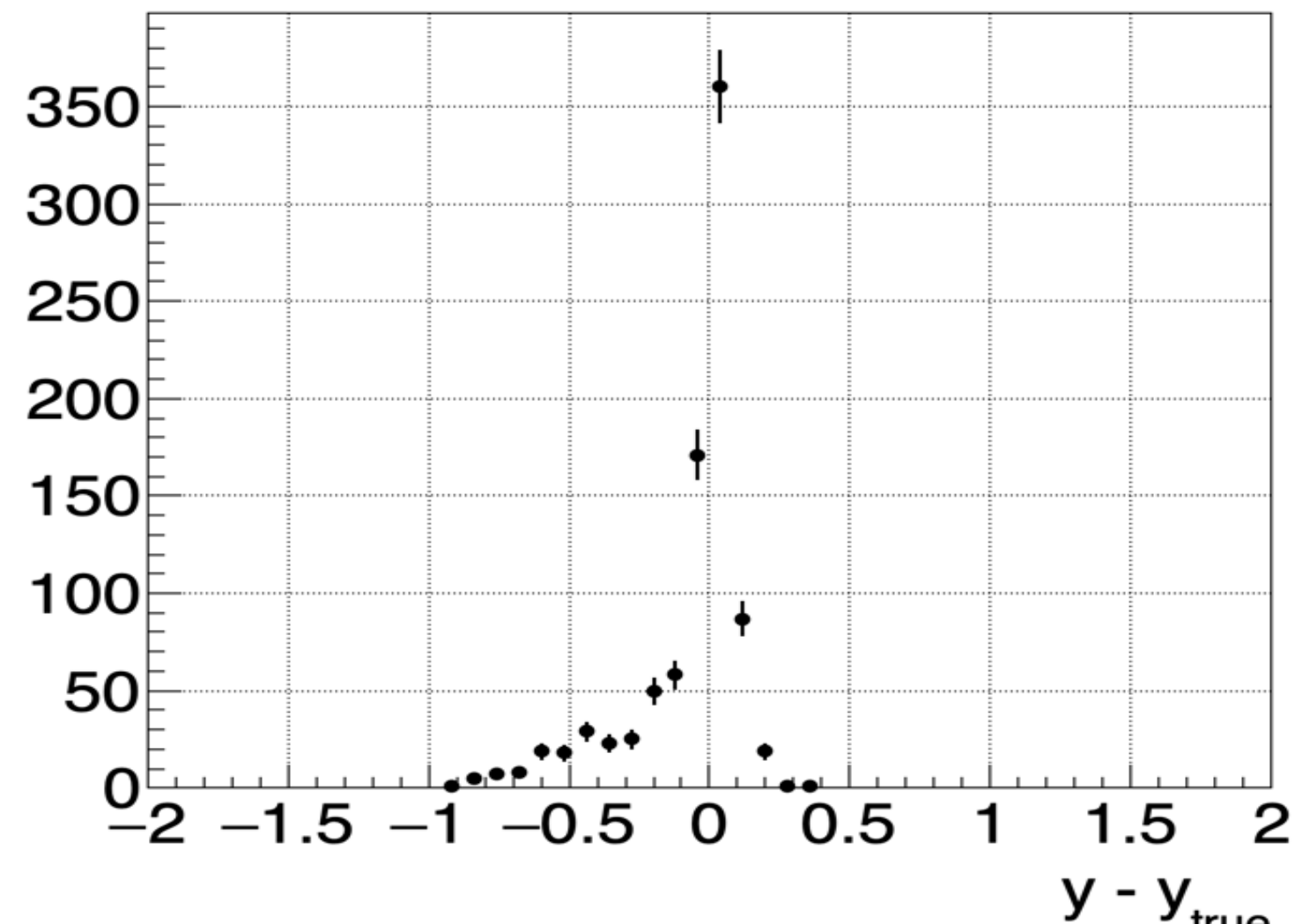


$p_T : 0.00 - 0.75$

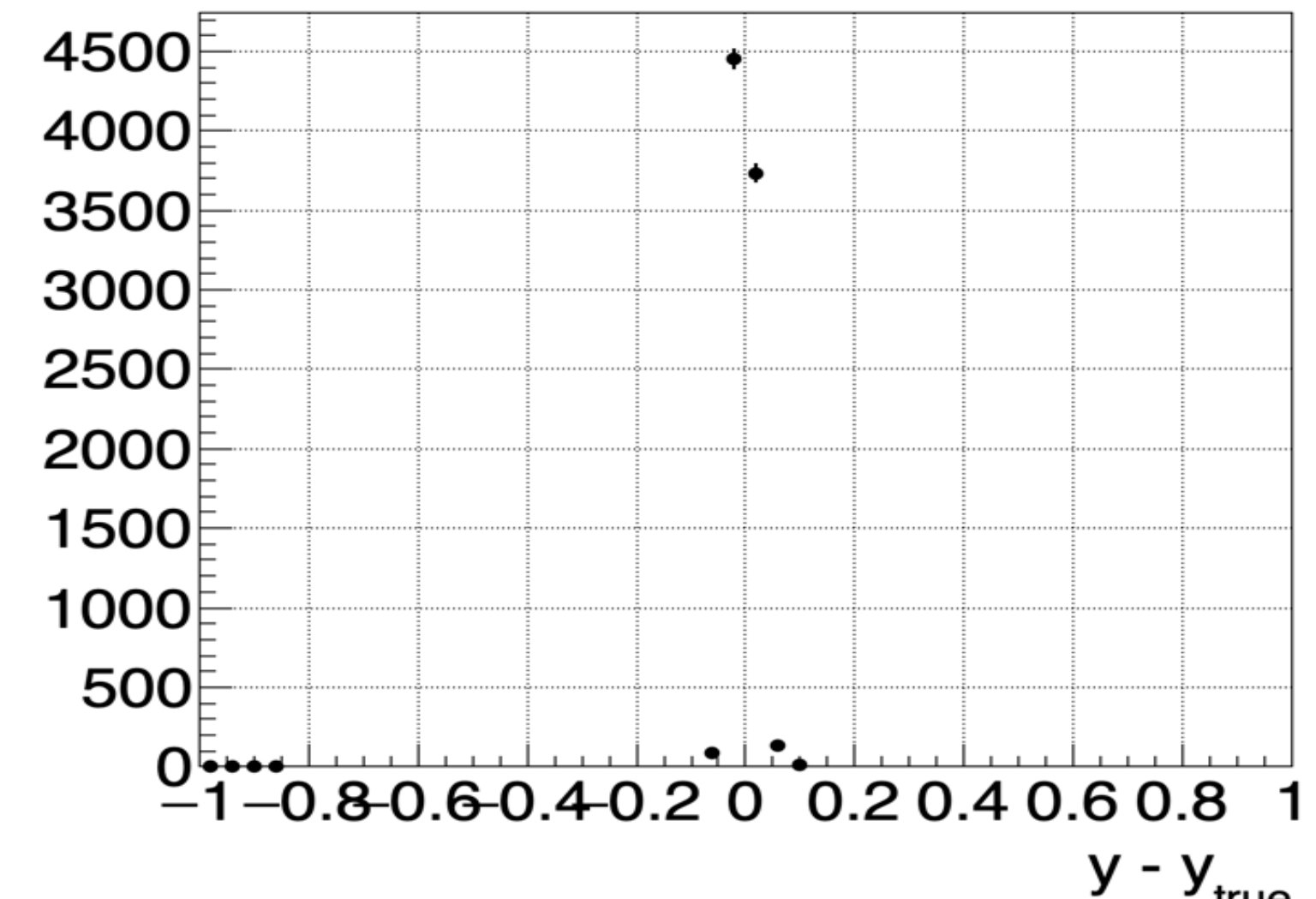
y - y_{true} distribution, π^+ tracks, $0.00 < p_T < 0.75$, full x, full z, full Q2, full y



y - y_{true} distribution, π^+ tracks, $0.00 < p_T < 0.75$, full x, full z, full Q2, full y



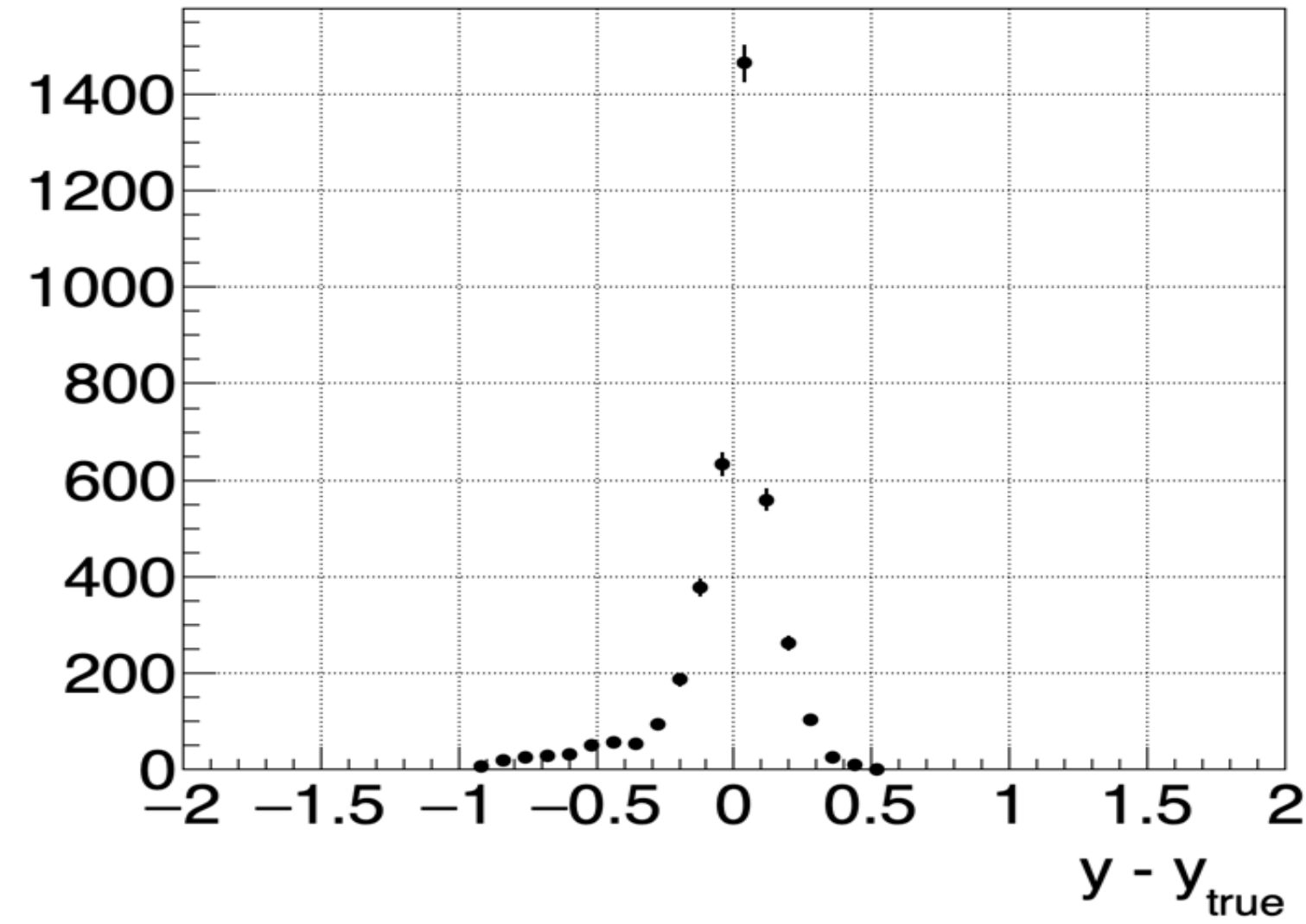
y - y_{true} distribution, π^+ tracks, $0.00 < p_T < 0.75$, full x, full z, full Q2, full y



$p_T : 0.75 - 1.50$

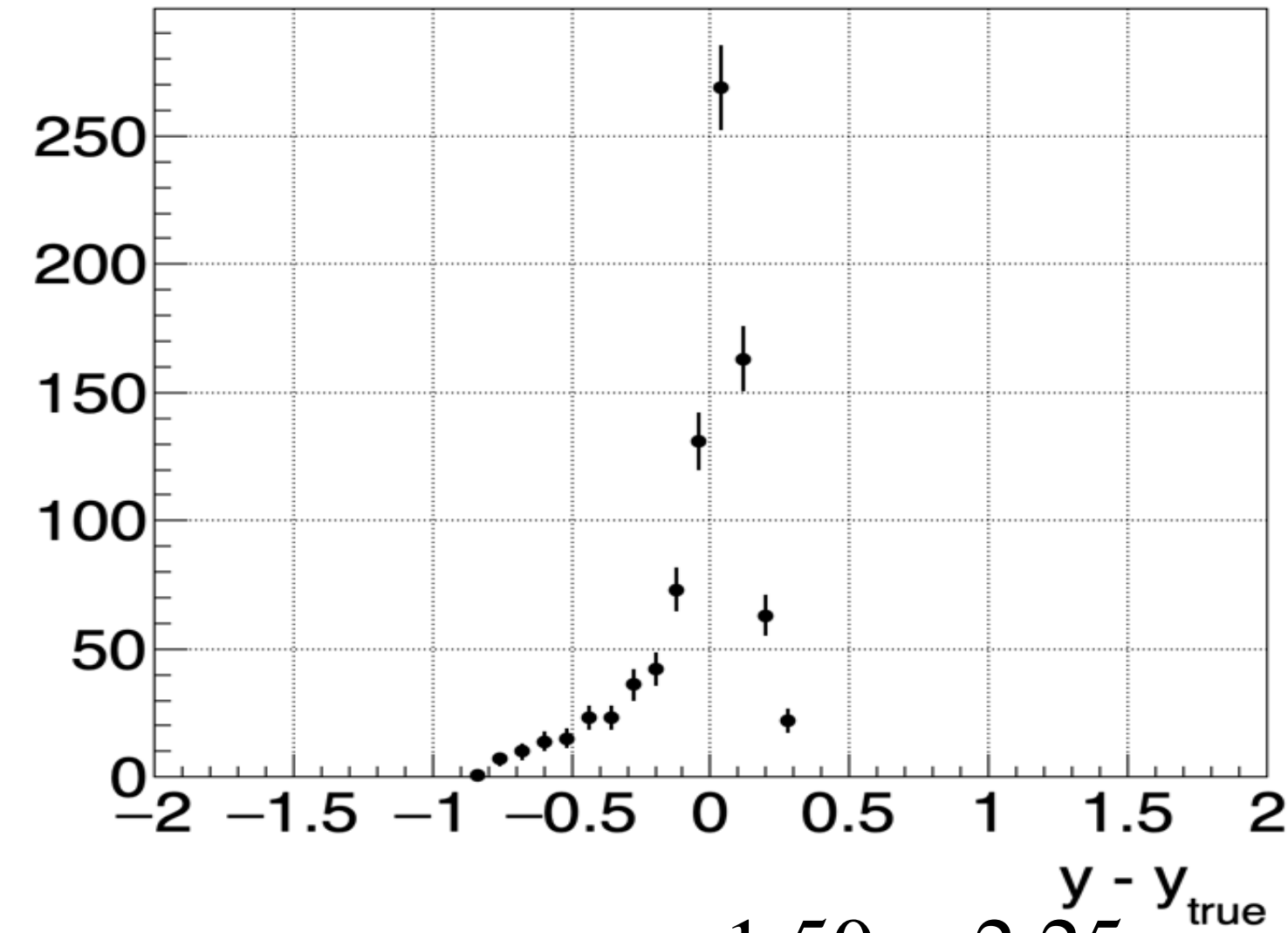
5X41 : Full

$y - y_{\text{true}}$ distribution, π^+ tracks, $0.75 < p_T < 1.50$, full x, full z, full Q2, full y



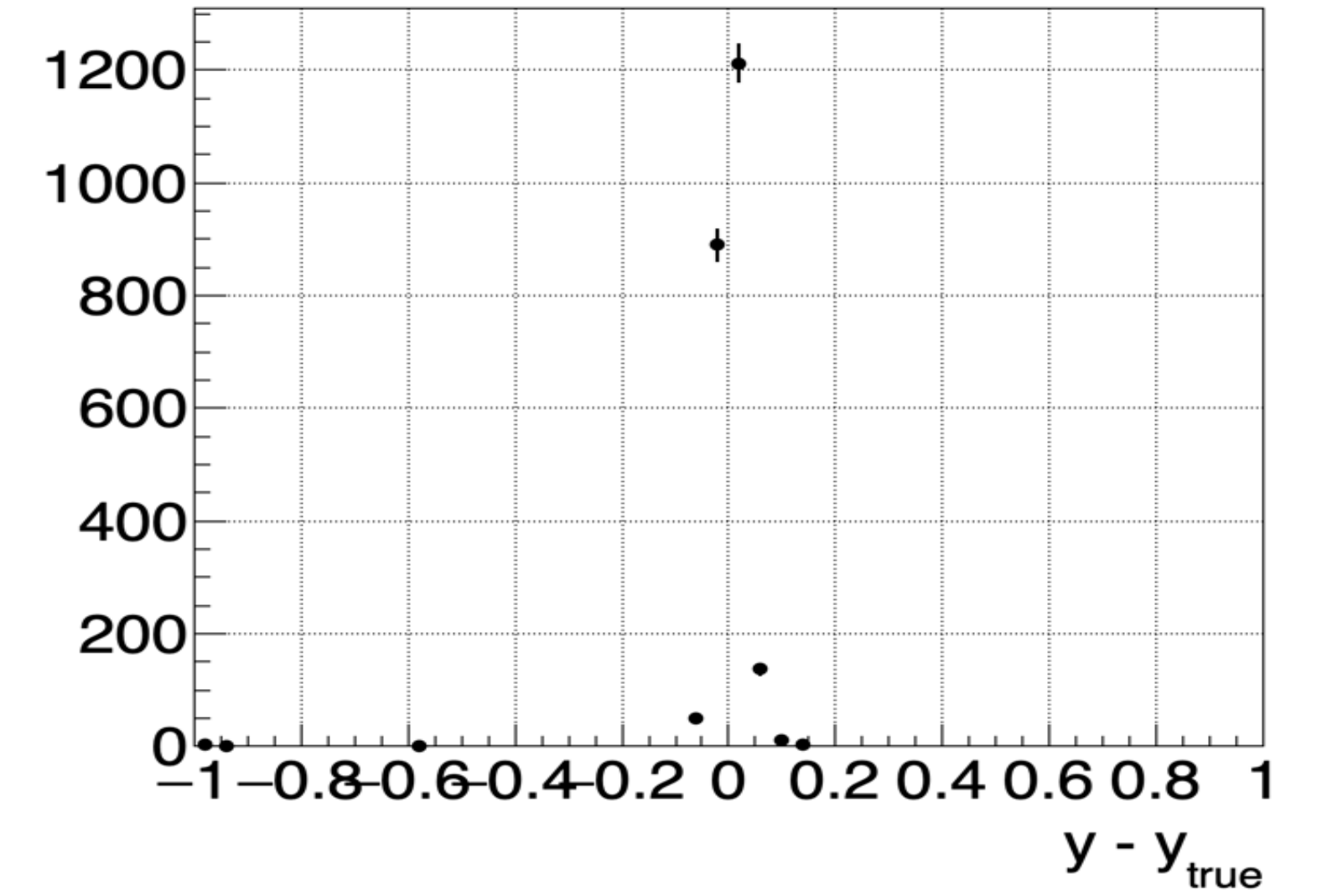
18X275 : Full

$y - y_{\text{true}}$ distribution, π^+ tracks, $0.75 < p_T < 1.50$, full x, full z, full Q2, full y



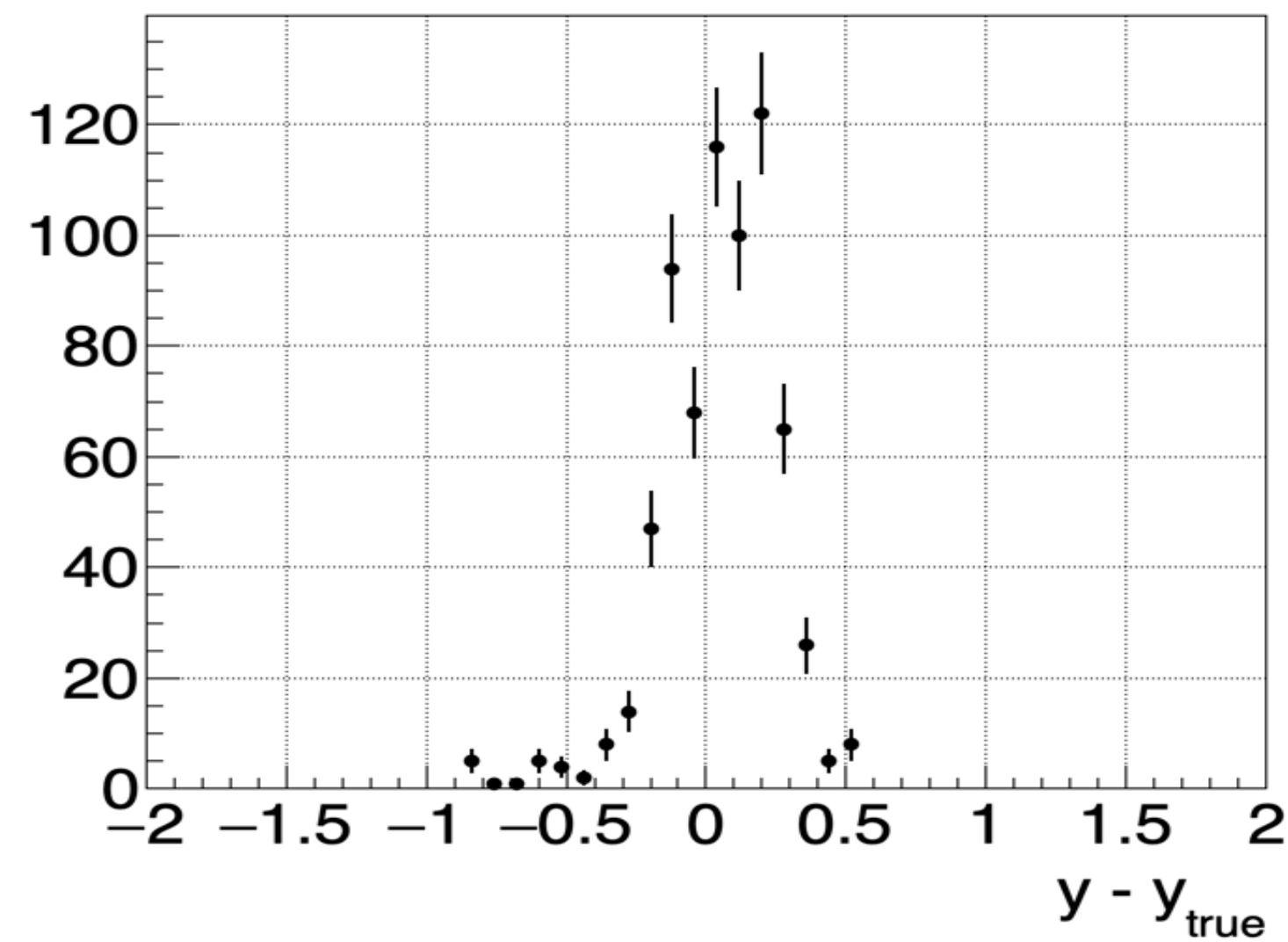
5X41 : Delphes

$y - y_{\text{true}}$ distribution, π^+ tracks, $0.75 < p_T < 1.50$, full x, full z, full Q2, full y

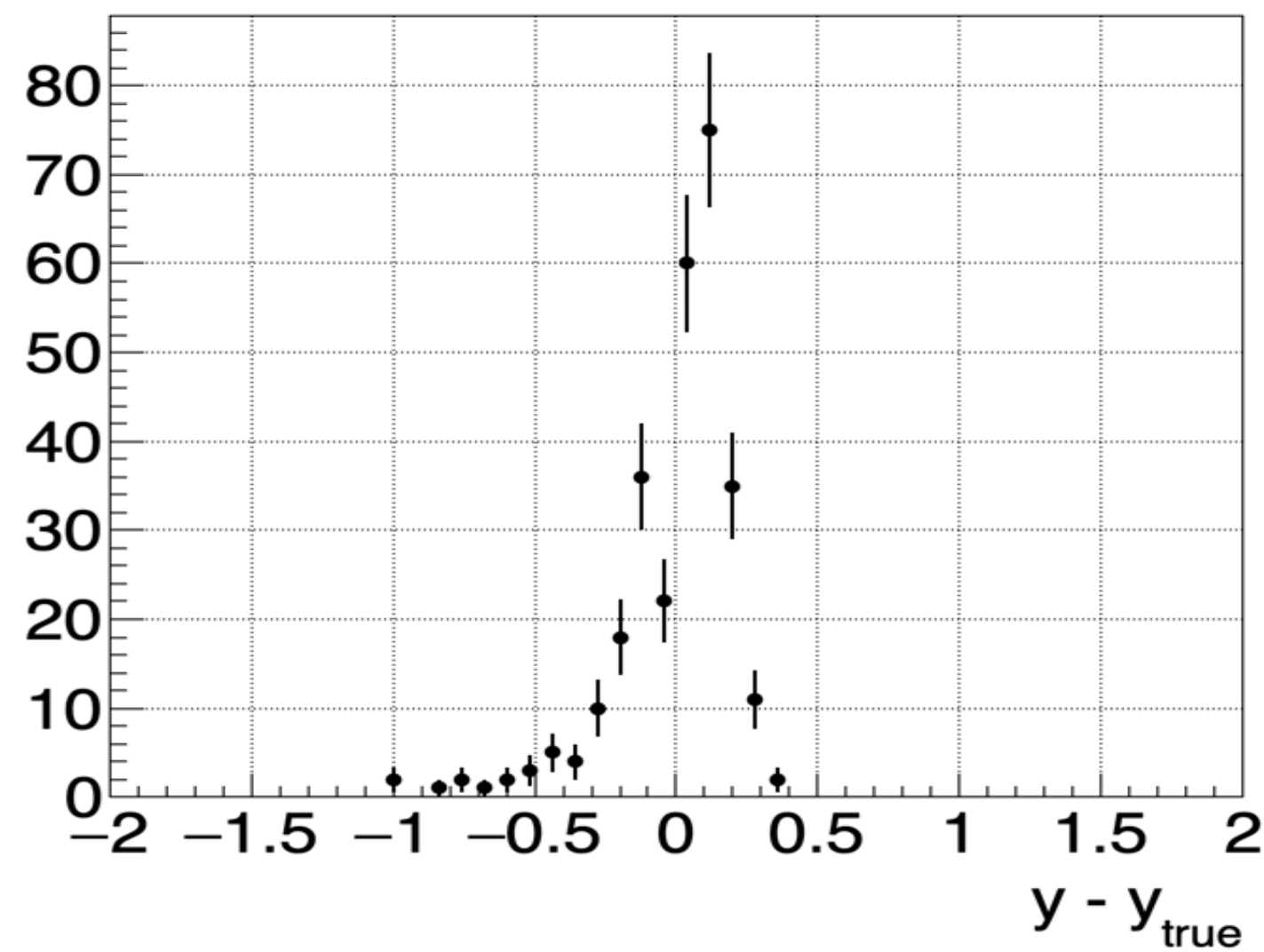


$p_T : 1.50 - 2.25$

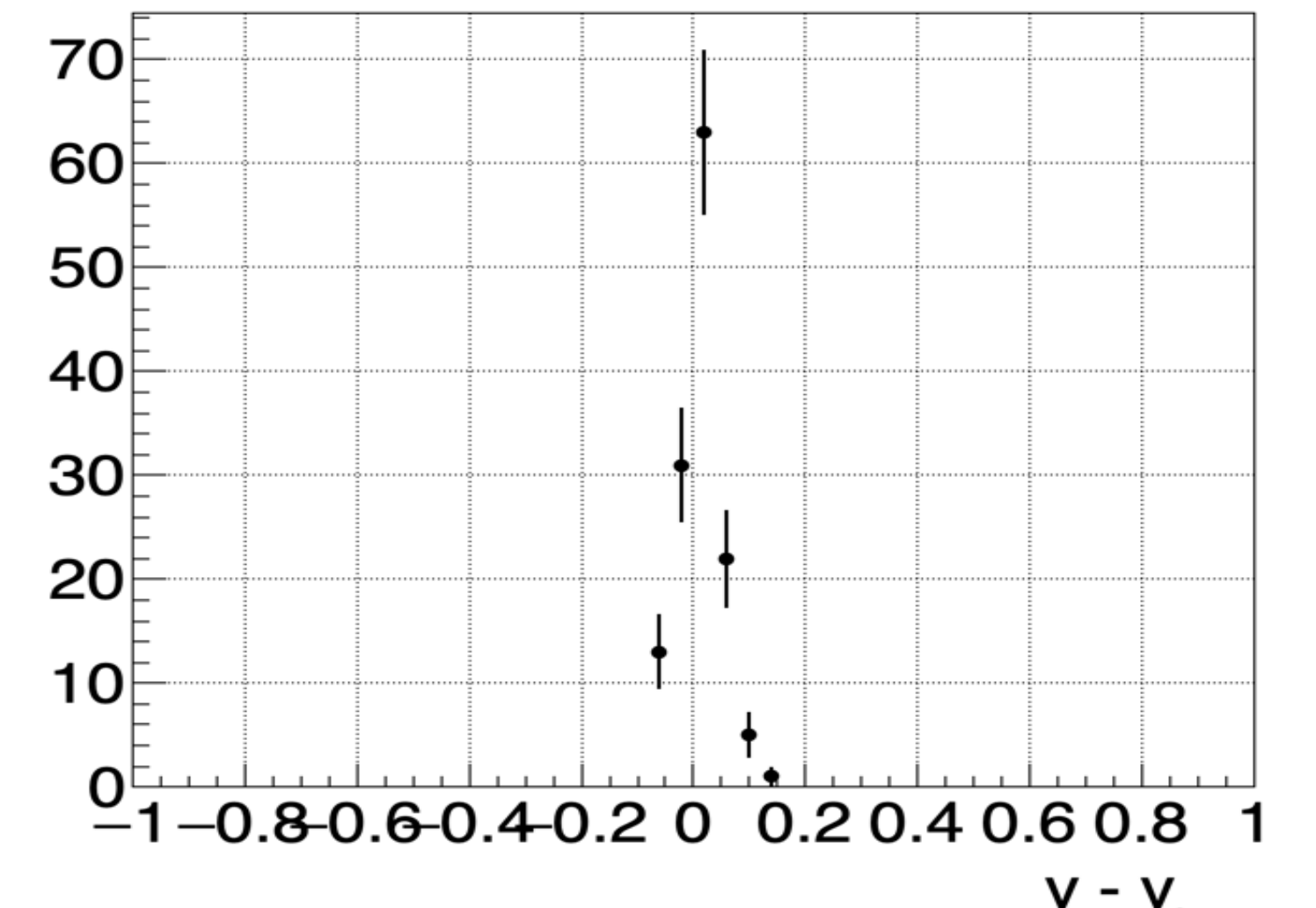
$y - y_{\text{true}}$ distribution, π^+ tracks, $1.50 < p_T < 2.25$, full x, full z, full Q2, full y



$y - y_{\text{true}}$ distribution, π^+ tracks, $1.50 < p_T < 2.25$, full x, full z, full Q2, full y



$y - y_{\text{true}}$ distribution, π^+ tracks, $1.50 < p_T < 2.25$, full x, full z, full Q2, full y



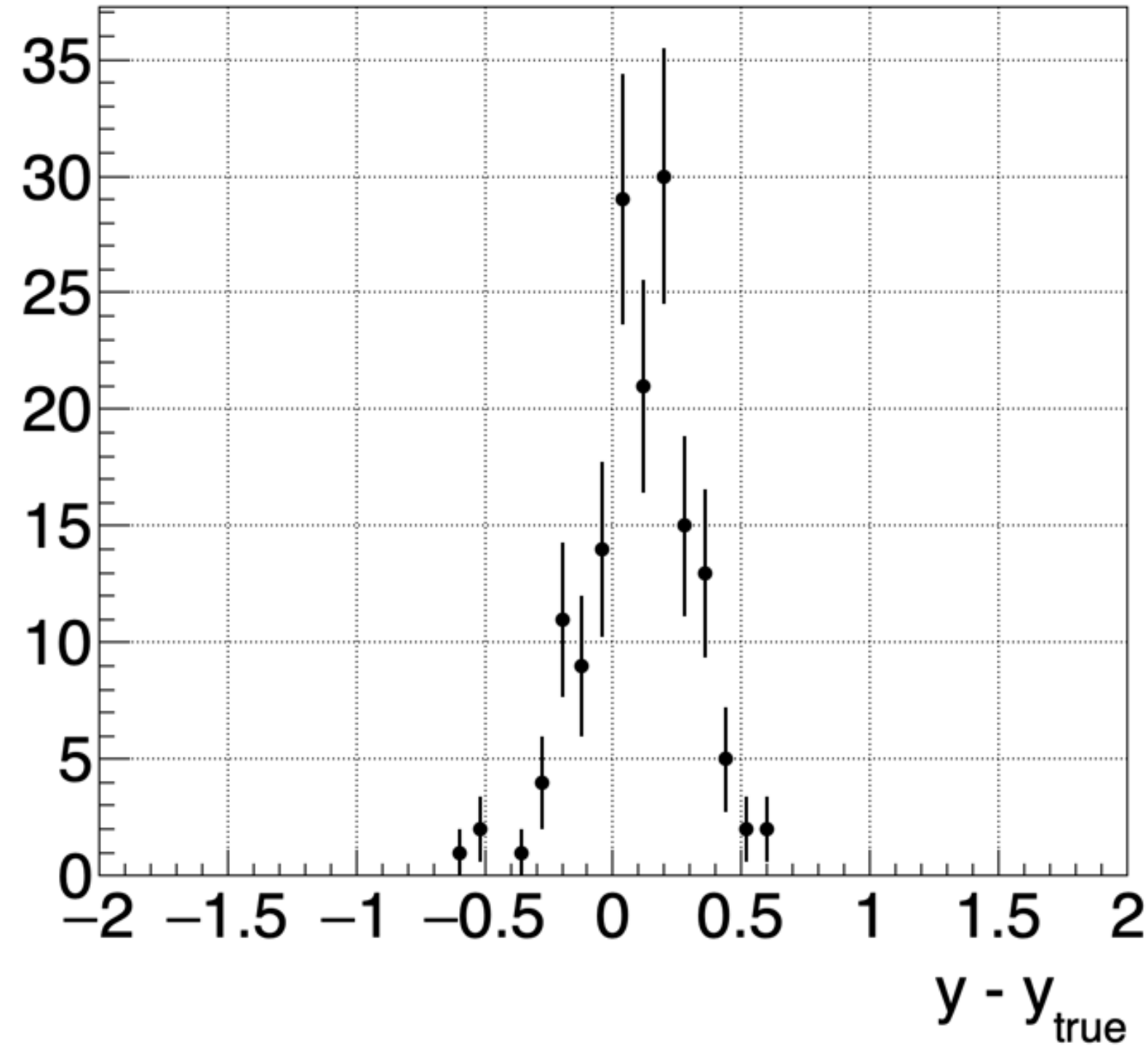
$p_T : 2.25 - 3.00$

5X41 : Full

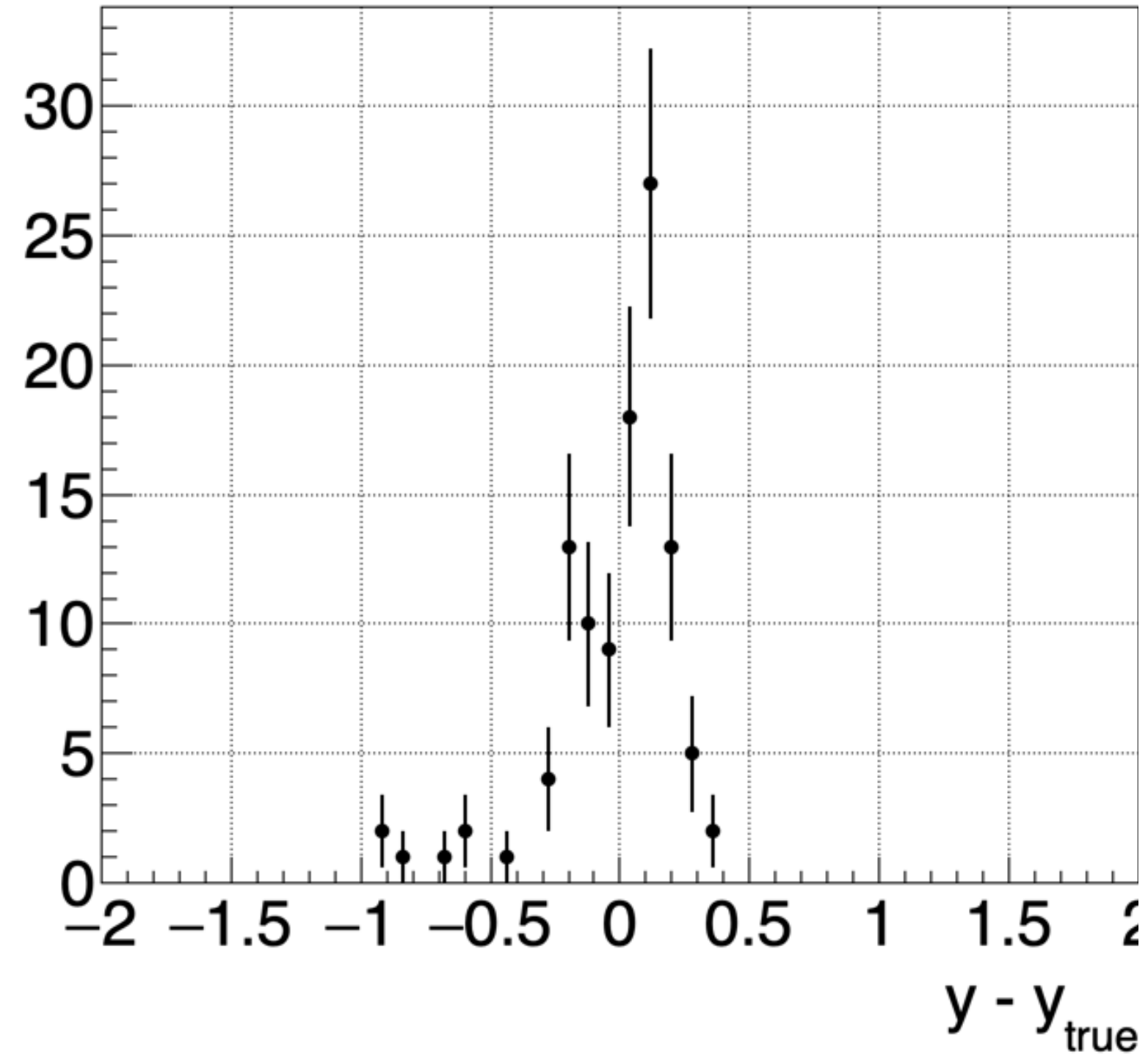
18X275 : Full

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$y - y_{\text{true}}$ distribution, π^+ tracks, $2.25 < p_T < 3.00$, full x, full z, full Q2, full y



$y - y_{\text{true}}$ distribution, π^+ tracks, $2.25 < p_T < 3.00$, full x, full z, full Q2, full y



$y - y_{\text{true}}$ distribution, π^+ tracks, $2.25 < p_T < 3.00$, full x, full z, full Q2, full y

