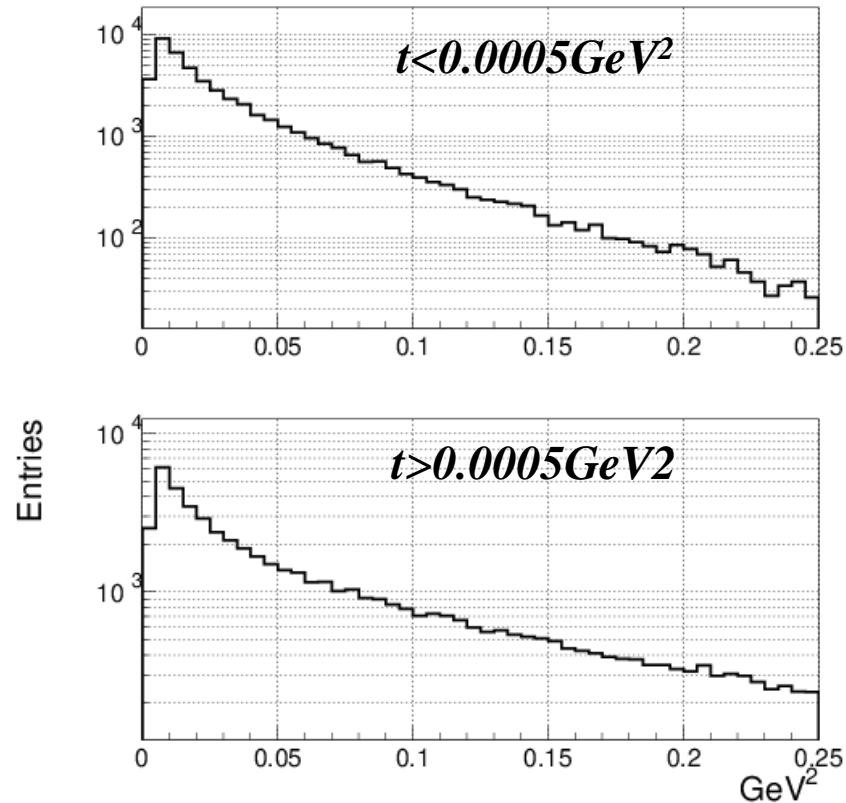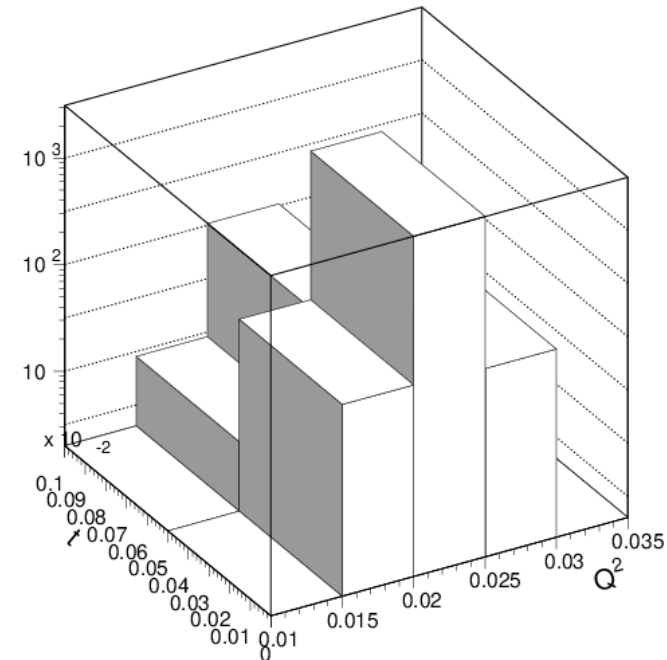# Cross section fit: TFF parameters extraction

Preparation for the fit

Simulated and reconstructed Q^2 distribution (300 PAC days)

Matrix element for the fit: Measured Q^2 and t distribution for the single bin of the actual values
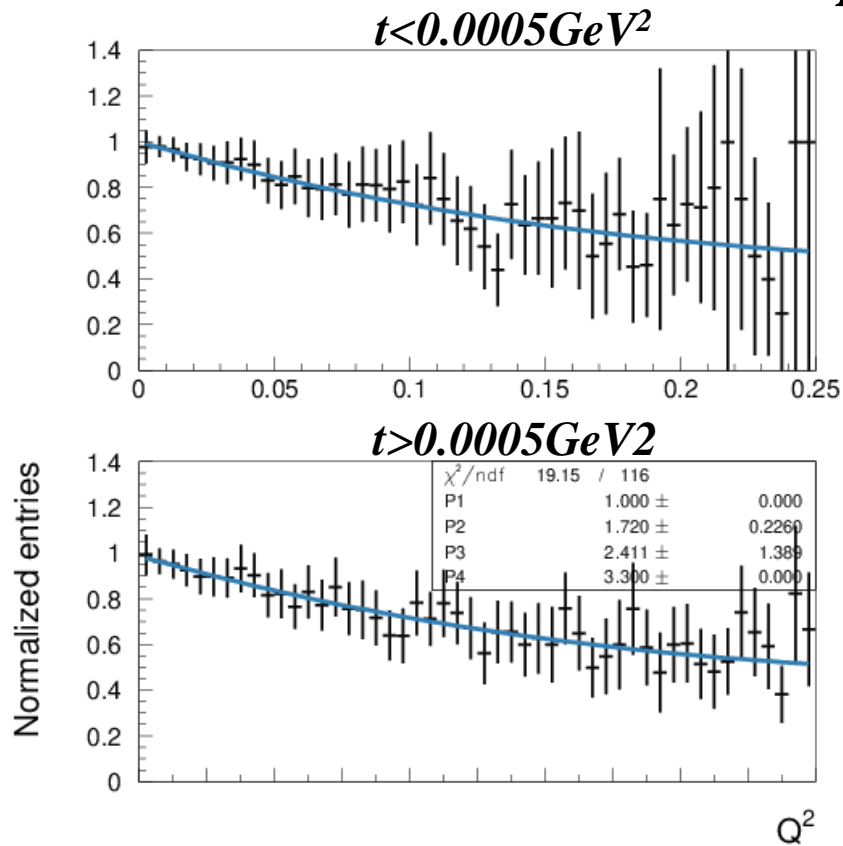

t: 2 bins
Q^2: 50 bins (0…0.25GeV^2)

Normalized Q2 distribution: measured over expected with TFF = 1 (30 PAC days)

$$Y = (1 - A(Q^2 + t) + B(Q^4 + t^2) + C(Q^2 t))^2$$

t<0.0005GeV²

t>0.0005GeV2

Normalized entries

χ²/ndf	19.15 / 116	
P1	1.000 ±	0.000
P2	1.720 ±	0.2260
P3	2.411 ±	1.389
P4	3.300 ±	0.000

Q²

Two parameter fit:
A = 1.72±0.2 (gen-d 1.66)
B = 2.41±1.3 (gen-d 2.76)

One parameter fit:
A = 1.69±0.07
B = 2.44±0.5

Three parameter fit:
A = 1.74±0.23
B = 2.31±1.5
C = 14±50