

DVCS RG-K Data Inspection

Sangbaek Lee
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RG-K winter 2018

/cache/clas12/rg-k/production/recon/fall2018/torus+1/6535MeV/pass2/v0/dst/train/skim16/
5875, 5877, 5878, 5879, 5880, 5881, 5883, 5884,
5885, 5886, 5887, 5889, 5890, 5891, 5892, 5893

RG-K spring 2024

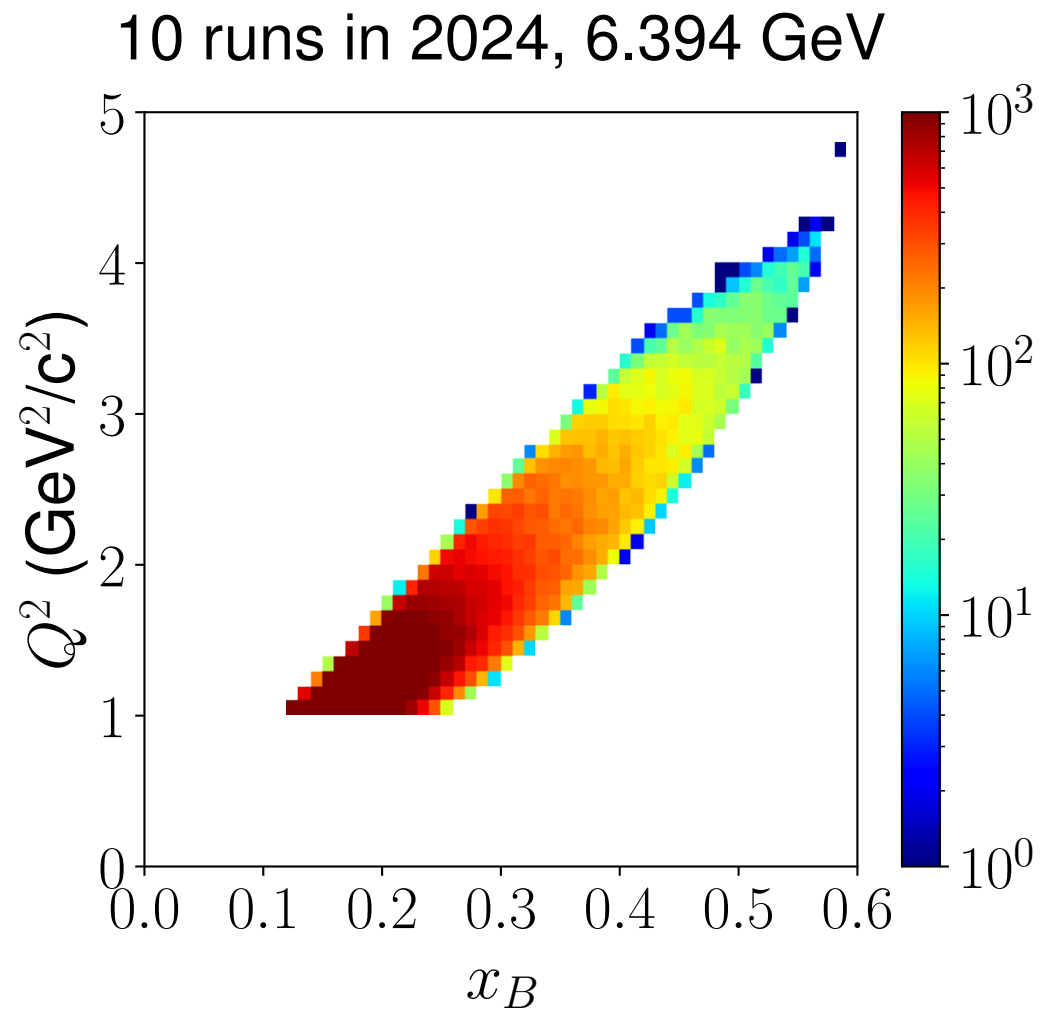
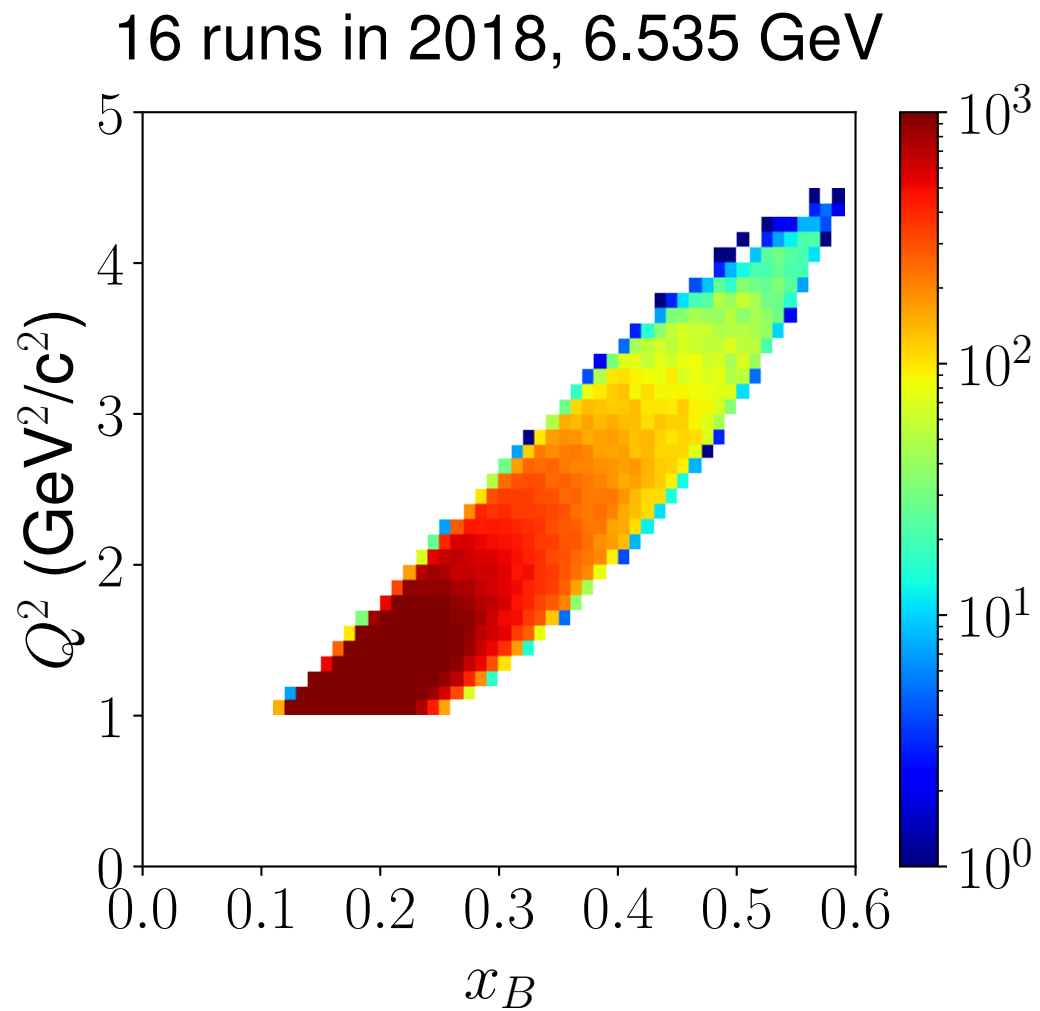
/volatile/clas12/rg-k/production/recon/fall2023/pass0.29/dst/train/skim16/
19334, 19336, 19337, 19339, 19340, 19341, 19343, 19348, 19349

Skim 16 used. Additional cuts : $Q^2 > 1 \text{ GeV}^2/c^2$, $W > 2 \text{ GeV}$, $E_{e'} > 2 \text{ GeV}$, $E_\gamma > 2 \text{ GeV}$, $p_p > 0.3 \text{ GeV}/c$ (CD), $0.5 \text{ GeV}/c$ (FD), $p_p < 1.6 \text{ GeV}/c$

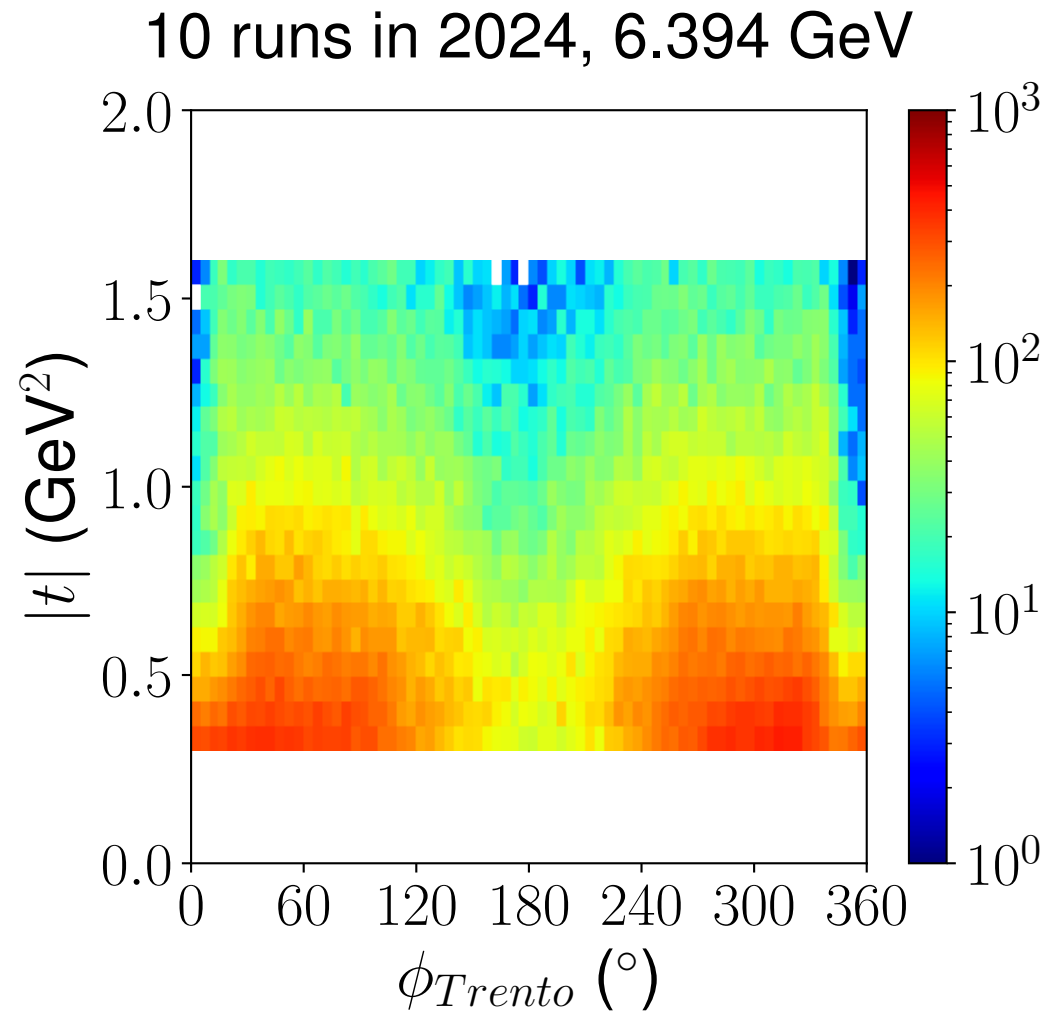
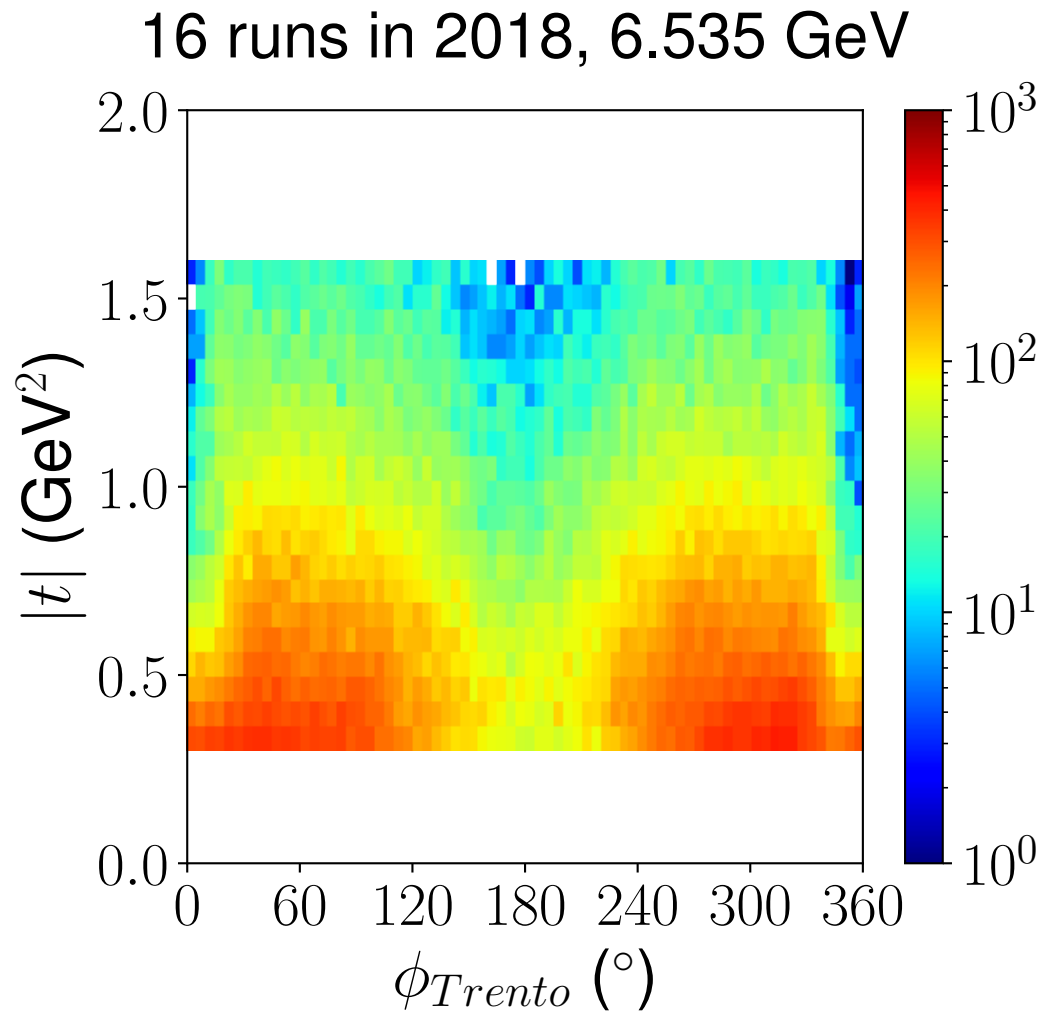
Statistics:

	FD proton data	CD proton data	Total
16 runs winter 2018	48k	189k	237k
10 runs spring 2024	38k	142k	180k

Q^2 - x_B Phase space

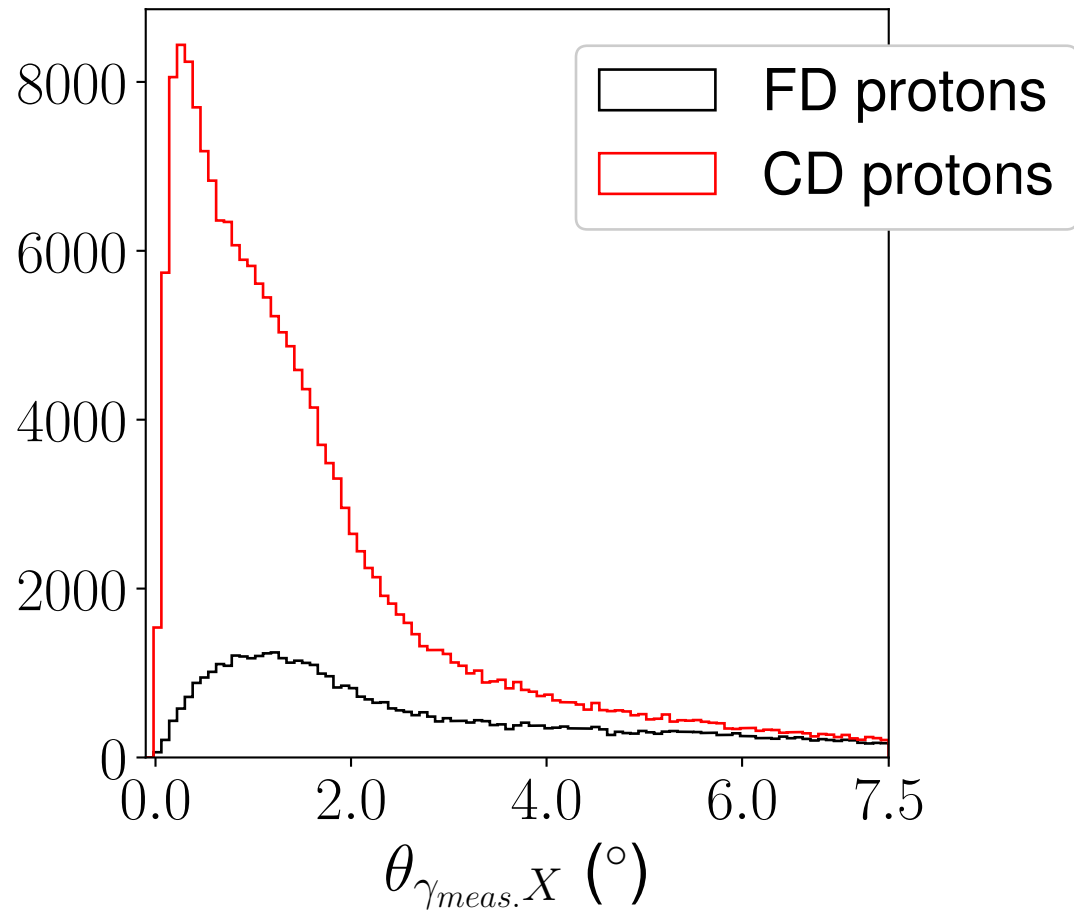


$|t|$ - ϕ Phase space

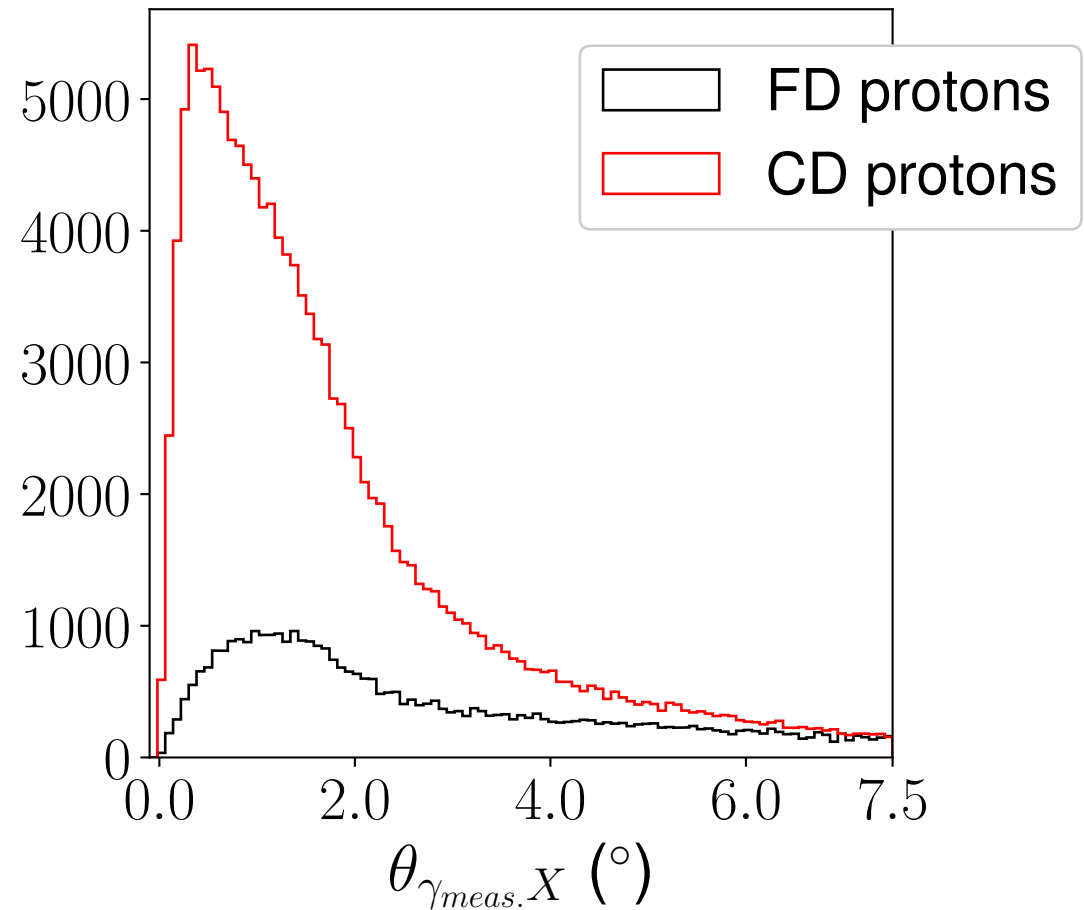


Cone angle between the measured γ and X (for $p(e,e'X)p$)

16 runs in 2018, 6.535 GeV

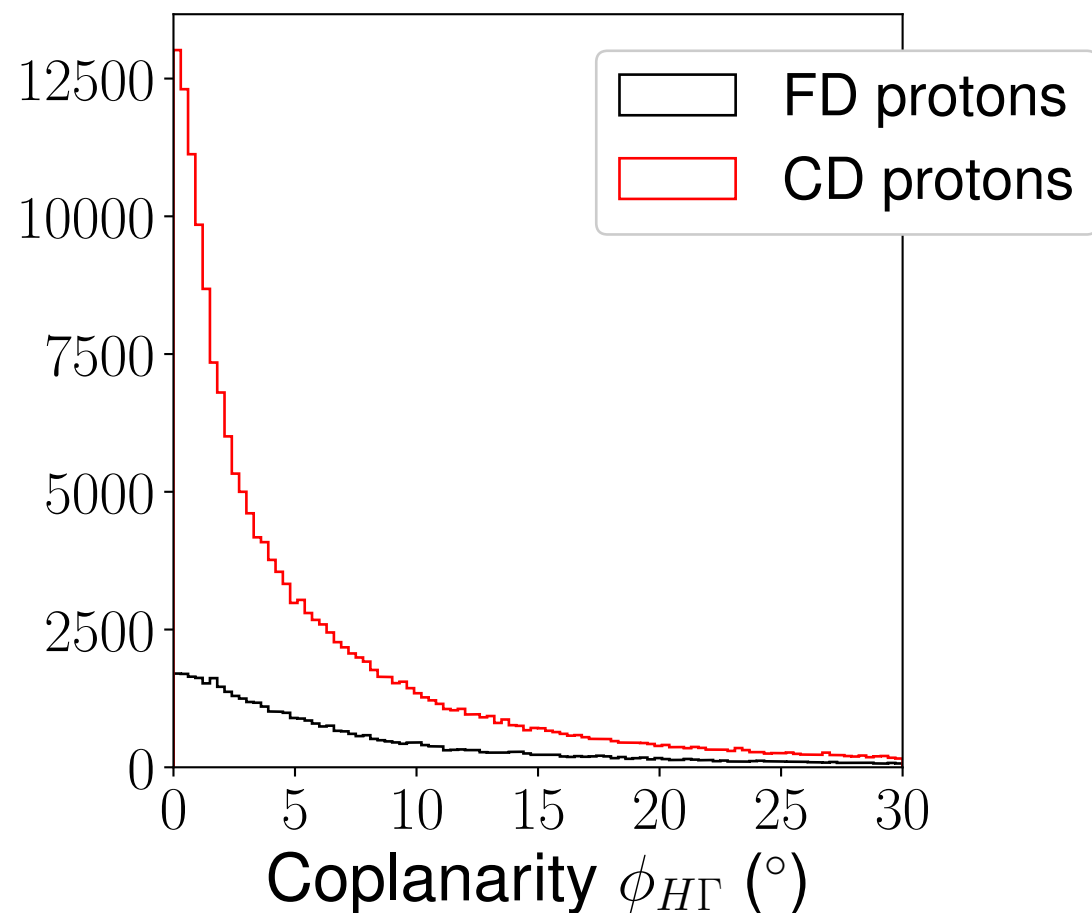


10 runs in 2024, 6.394 GeV

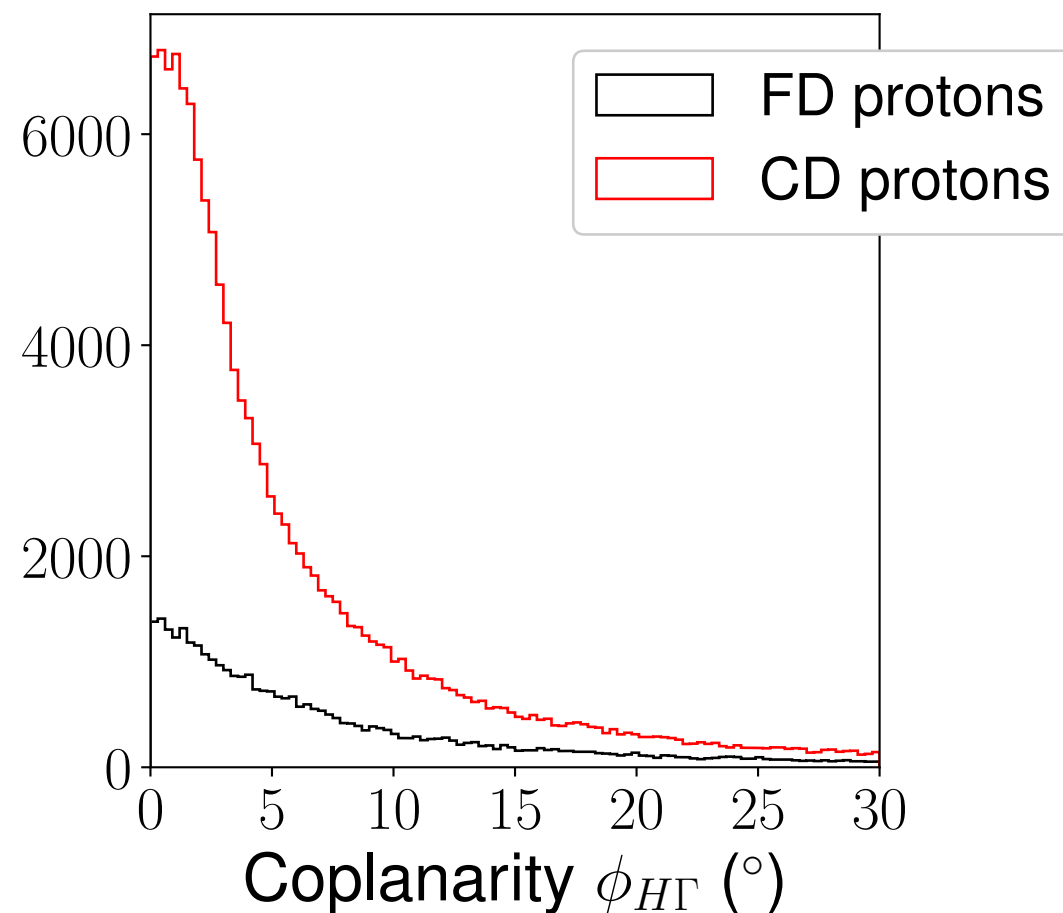


Coplanarity between the hadron and photon planes

16 runs in 2018, 6.535 GeV

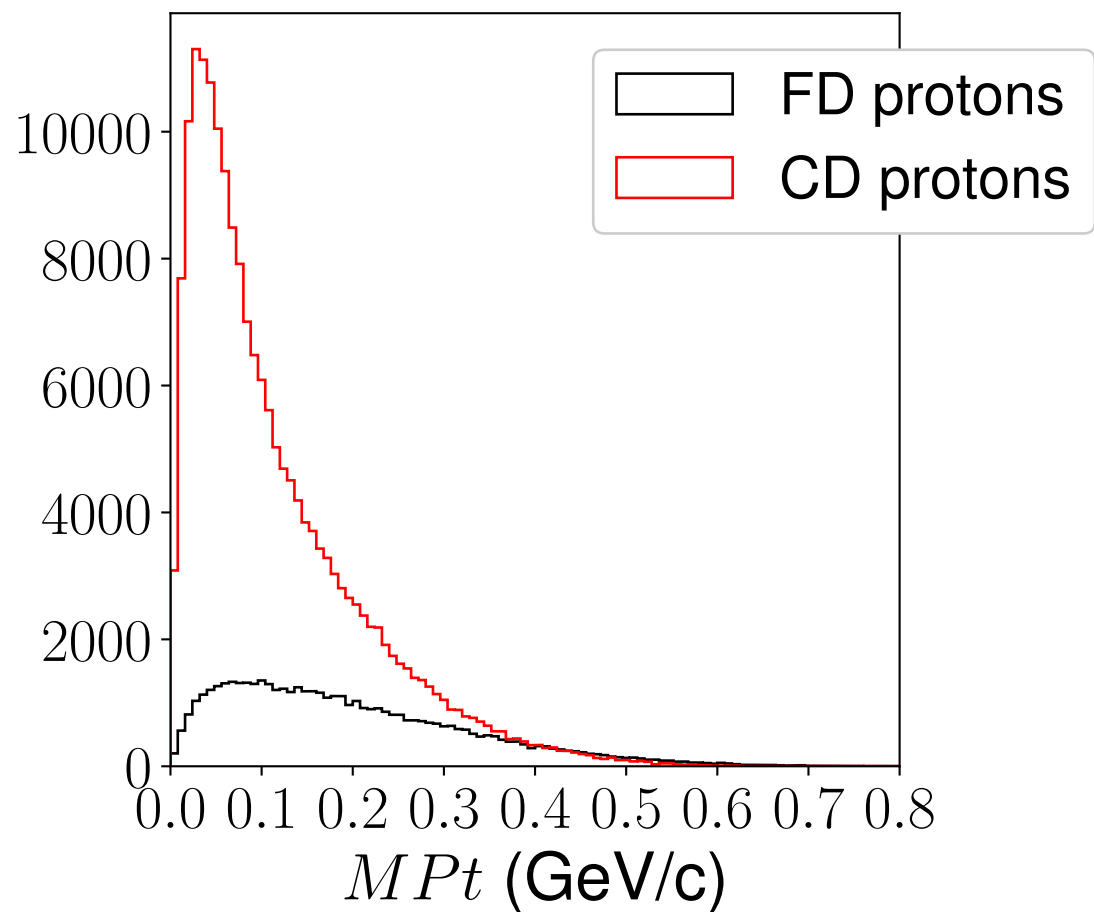


10 runs in 2024, 6.394 GeV

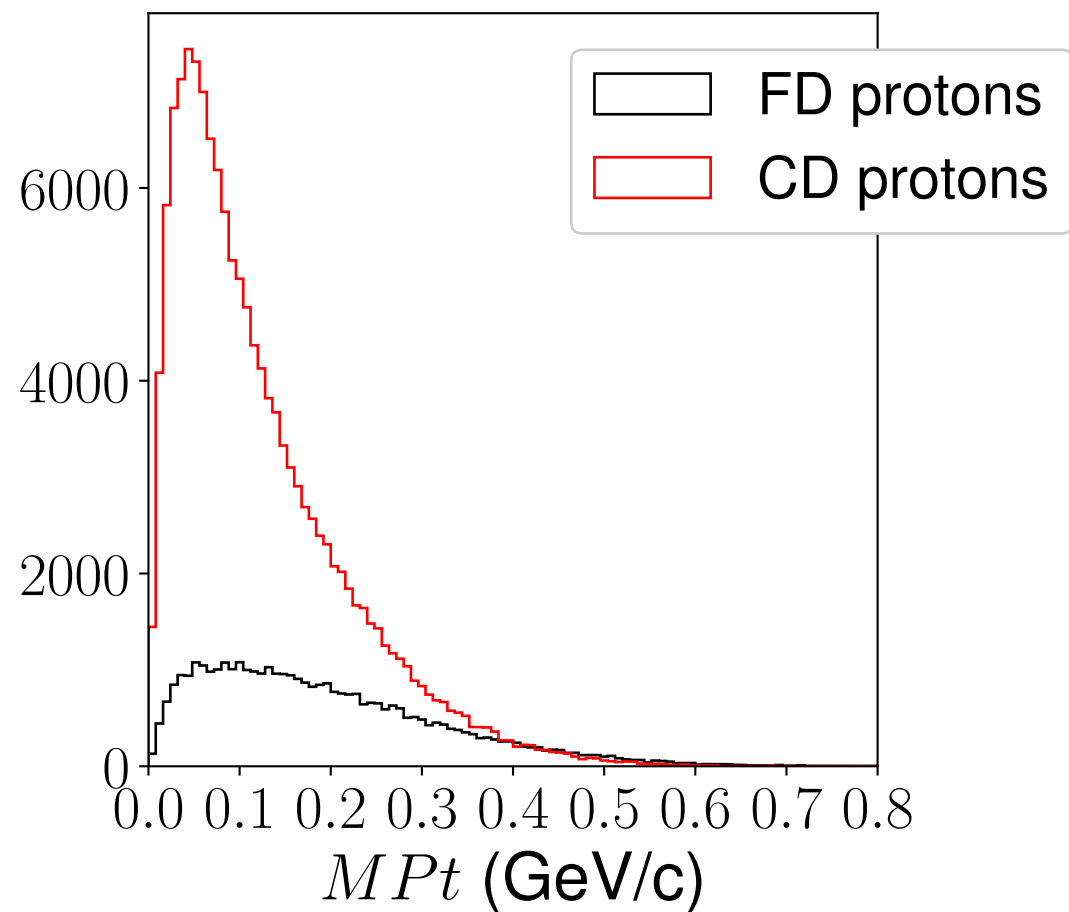


Missing transverse momentum

16 runs in 2018, 6.535 GeV

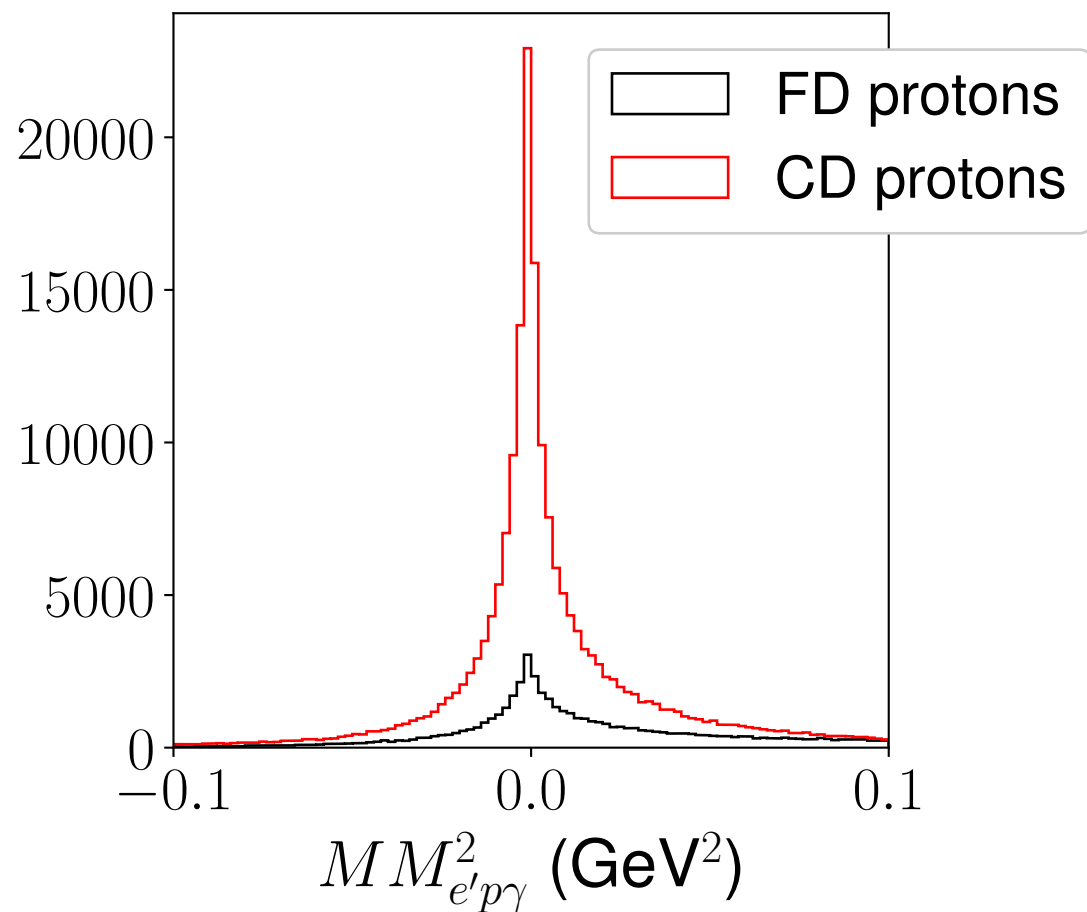


10 runs in 2024, 6.394 GeV

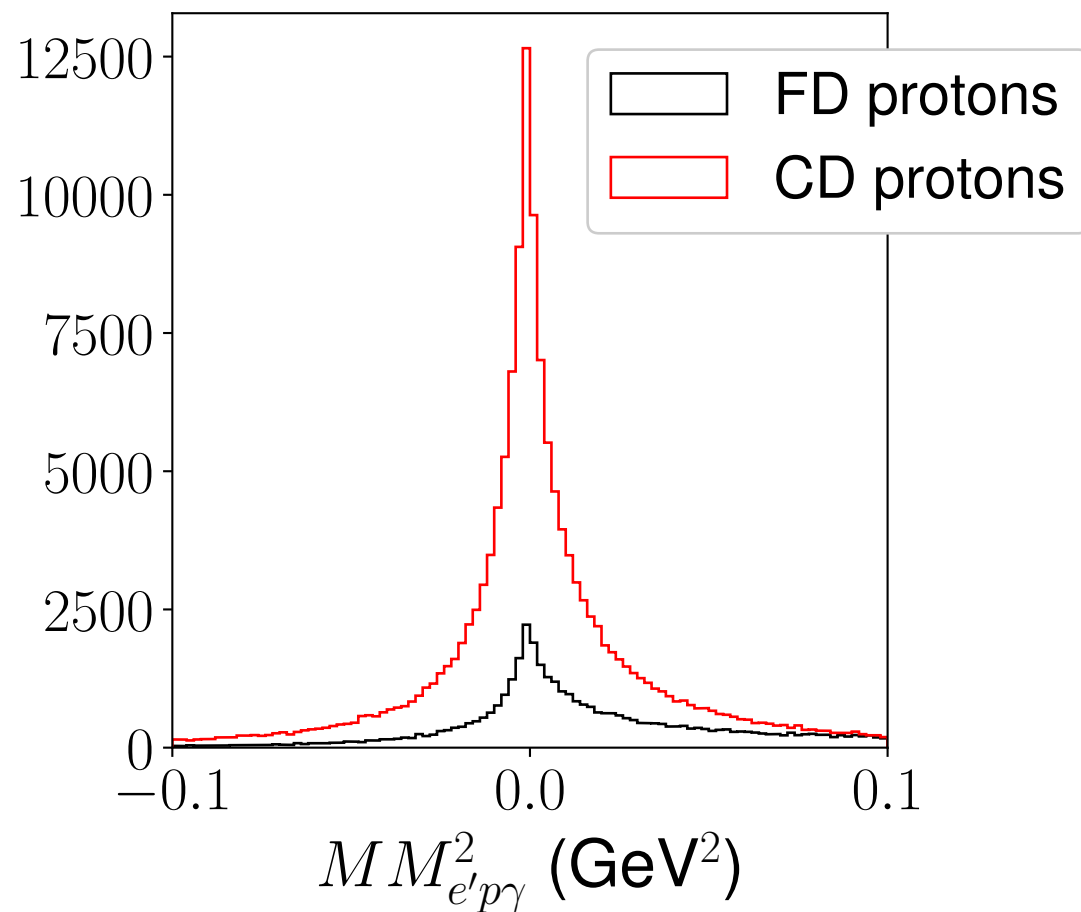


Missing Mass squared of $e'p\gamma$

16 runs in 2018, 6.535 GeV

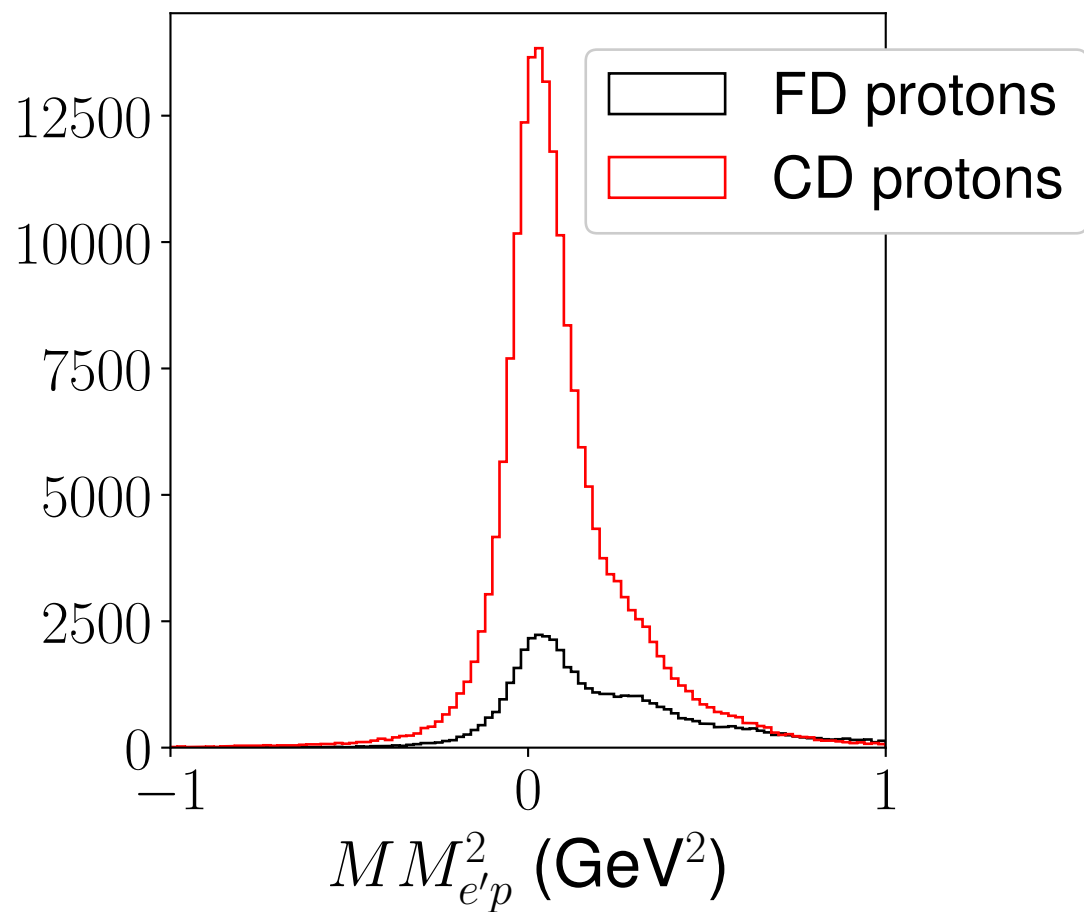


10 runs in 2024, 6.394 GeV

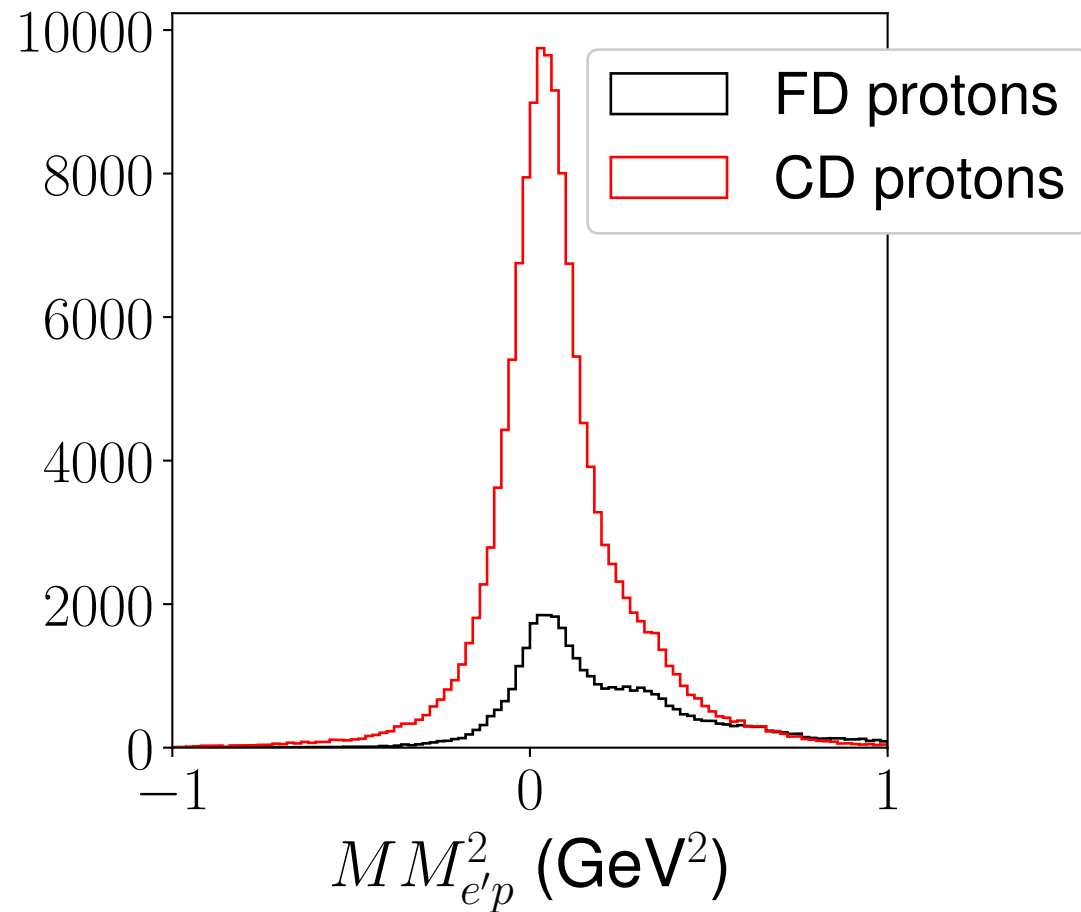


Missing Mass squared of e'p

16 runs in 2018, 6.535 GeV

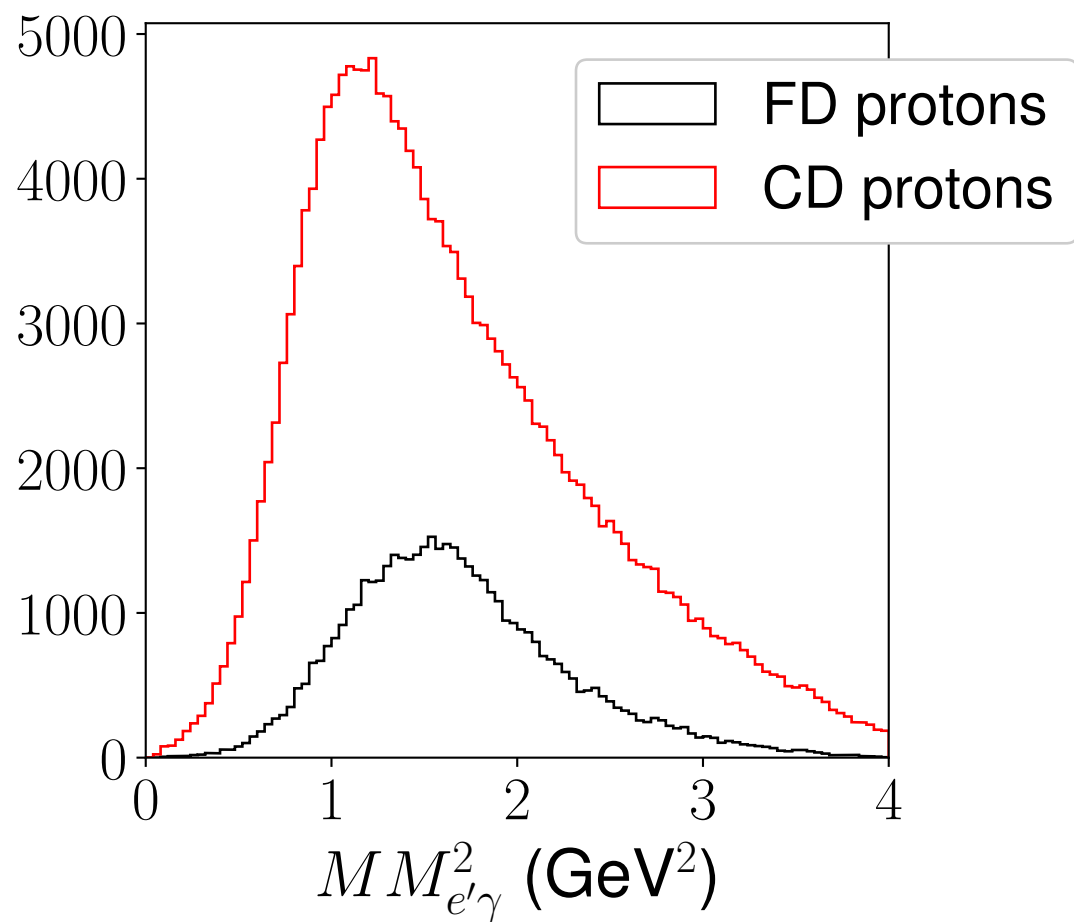


10 runs in 2024, 6.394 GeV

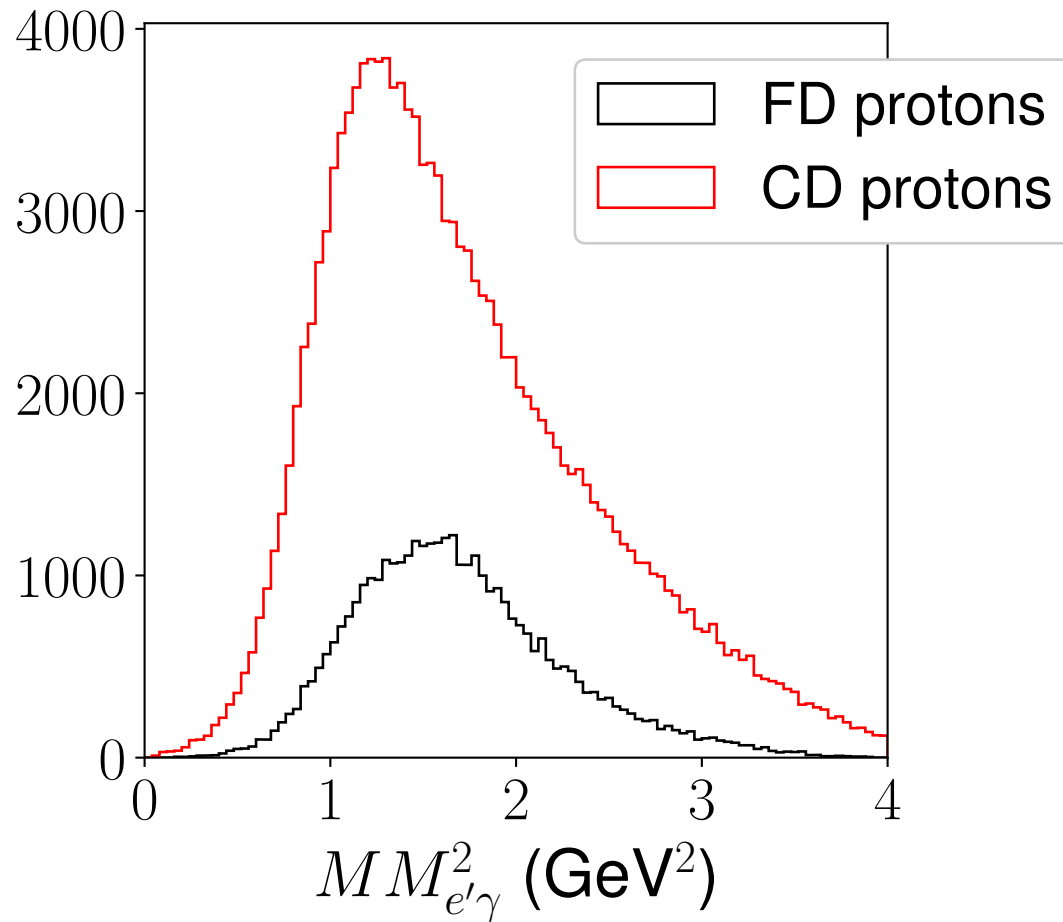


Missing Mass squared of $e'\gamma$

16 runs in 2018, 6.535 GeV

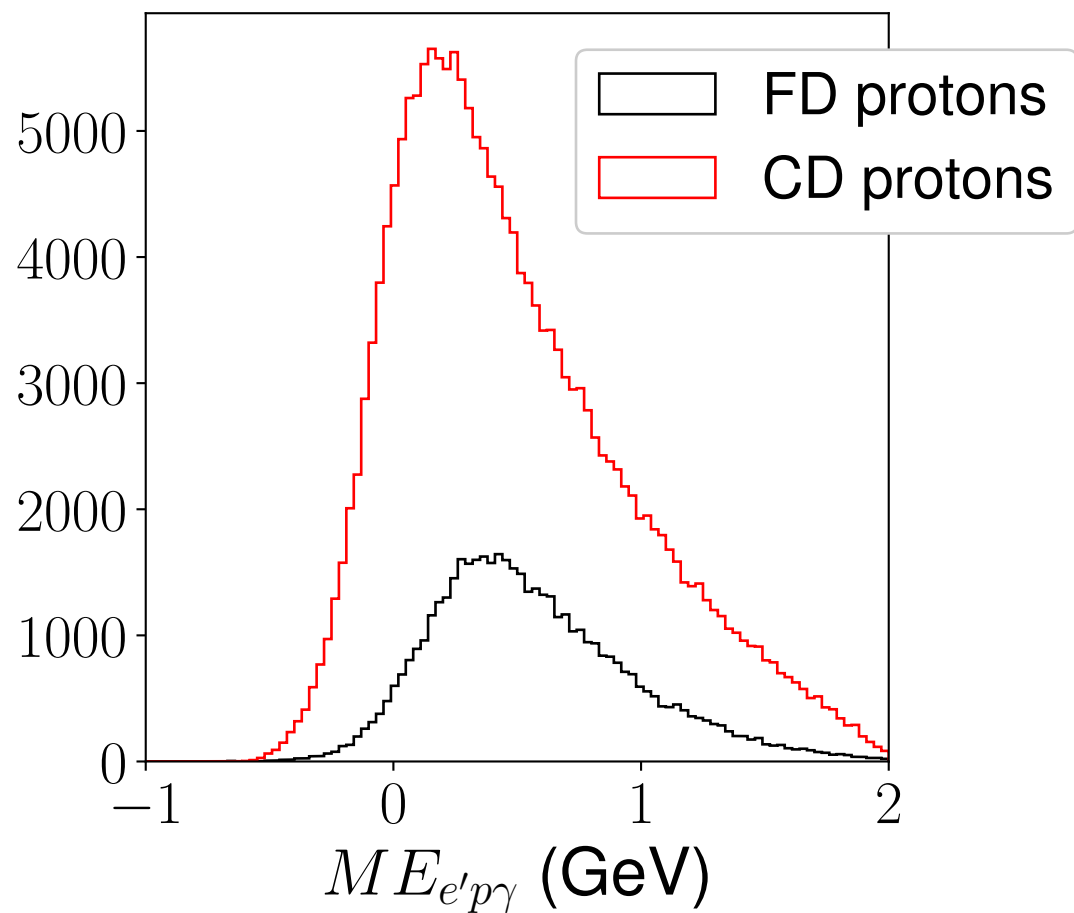


10 runs in 2024, 6.394 GeV

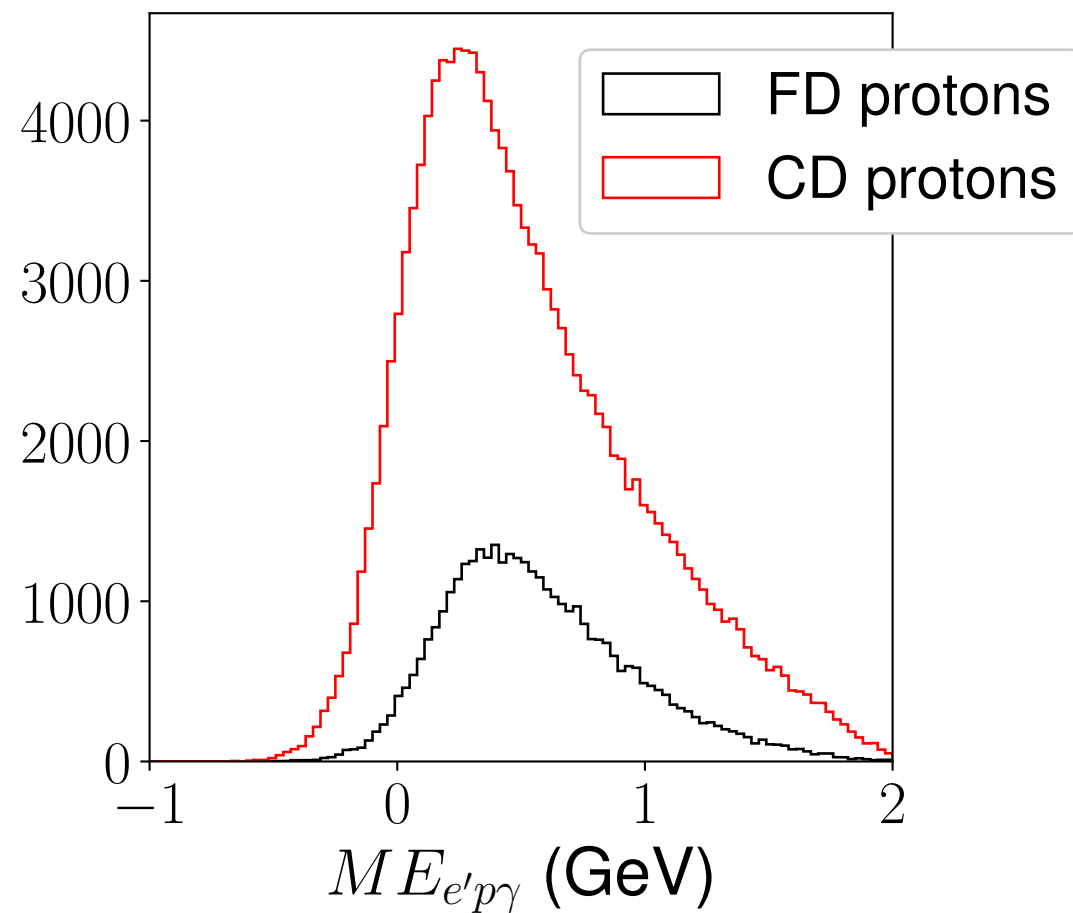


Missing Energy of $e'p\gamma$

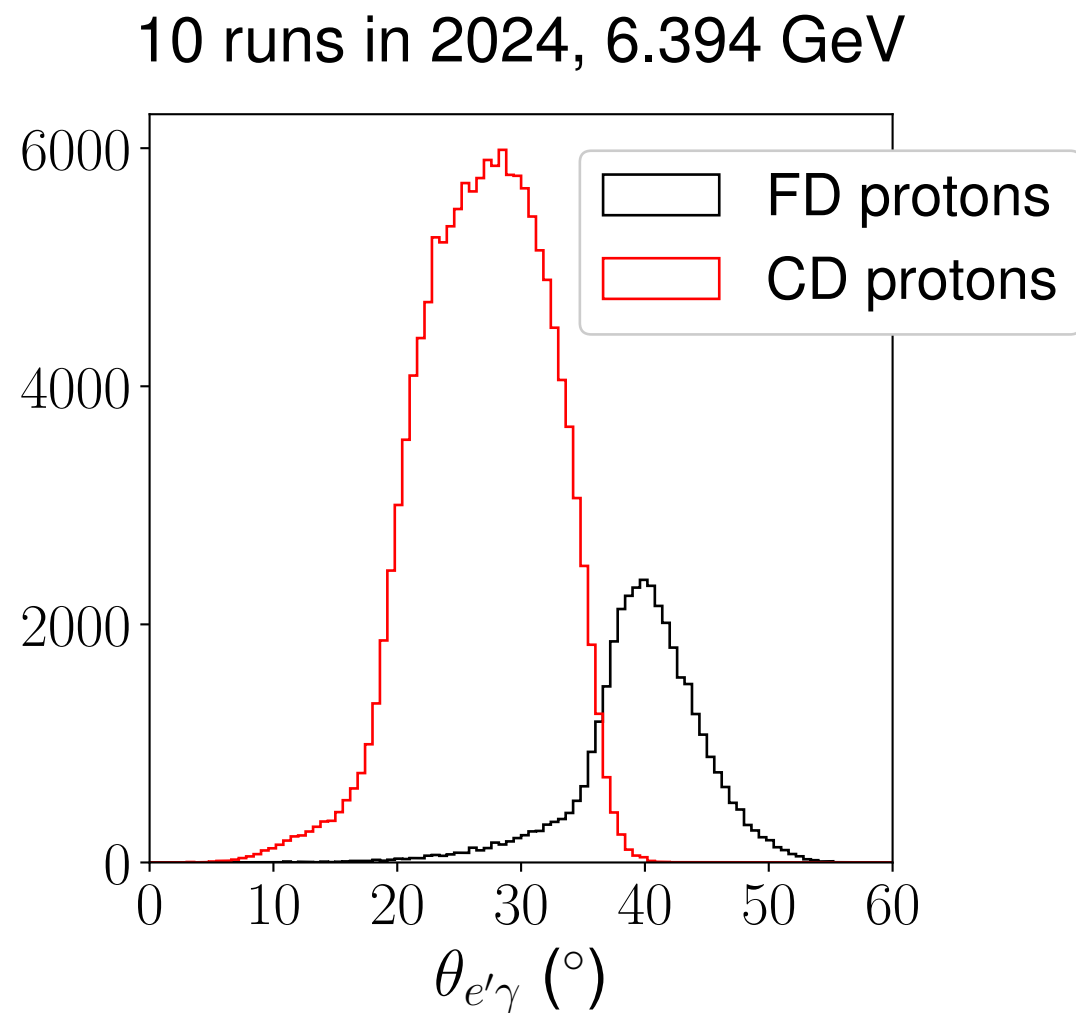
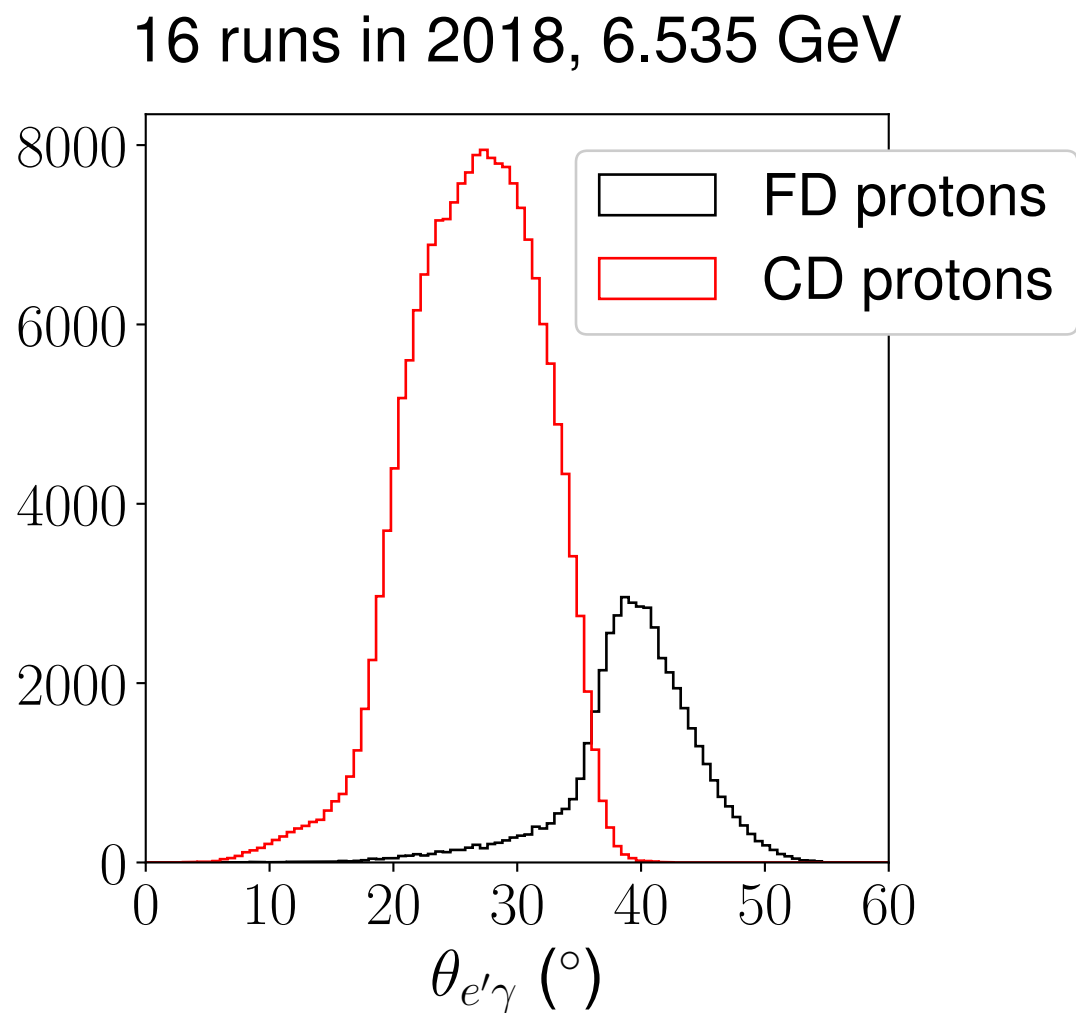
16 runs in 2018, 6.535 GeV



10 runs in 2024, 6.394 GeV



Angle between scattered electron e' and produced photon γ



This is not the exclusivity variable, but useful for regulating the radiation.