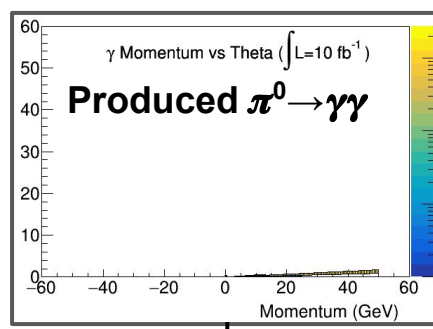
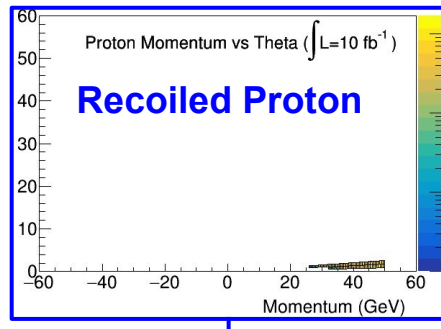
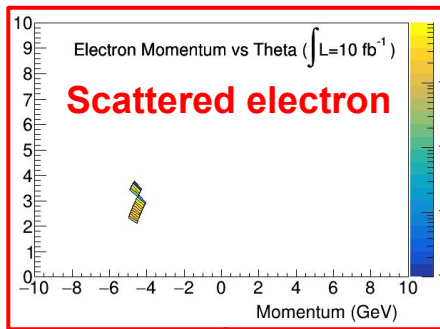
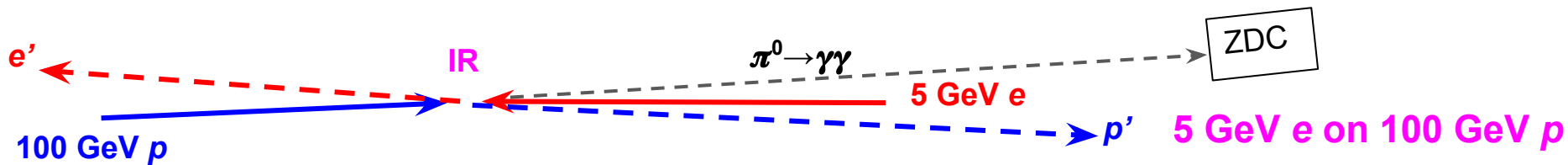


# $u$ -Channel Exclusive Electroproduction of $\pi^0$ at $s(\gamma^*p)=W^2=10 \text{ GeV}^2$ , $t = t_{max}$ , $u = u_{min}$



## Detector requirement:

- e Endcap**: better than 90% efficiency in forward  $e$  detection
- p Endcap**: better than 90% efficiency in forward  $p$  detection
- ZDC**: centering neutral particle path through the center of magnet aperture onto the center of ZDC. Smaller than 3cm granularity
- Momentum resolution: 0.5-1% for particle momentum  $> 20 \text{ GeV}$ ; less than 0.5% for particle momentum  $< 10 \text{ GeV}$ .

$Q^2$ ( $\text{GeV}^2$ )	$\theta_{e'}$ (deg)	$\eta_{e'}$	$P_{e'}$ (GeV)	$\theta_{p'}$ (deg)	$\eta_{p'}$	$P_{p'}$ (GeV)	$\theta_{\pi^0}$ (deg)	$\eta_{\pi^0}$	$P_{\pi^0}$ (GeV)	$P_{\gamma}$ (GeV)
6.2	152	-1.39	5.31	-1.84	4.13	43.40	1.43	4.38	56.29	28.24
7.0	150	-1.32	5.35	-1.92	4.09	45.50	1.43	4.38	54.12	27.06
8.2	148	-1.24	5.40	-1.85	4.12	49.74	1.43	4.38	49.84	24.72
9.3	146	-1.19	5.46	-1.92	4.09	51.90	1.43	4.38	47.60	23.80
10.5	144	-1.12	5.52	-1.94	4.07	54.96	1.43	4.38	44.50	22.25