

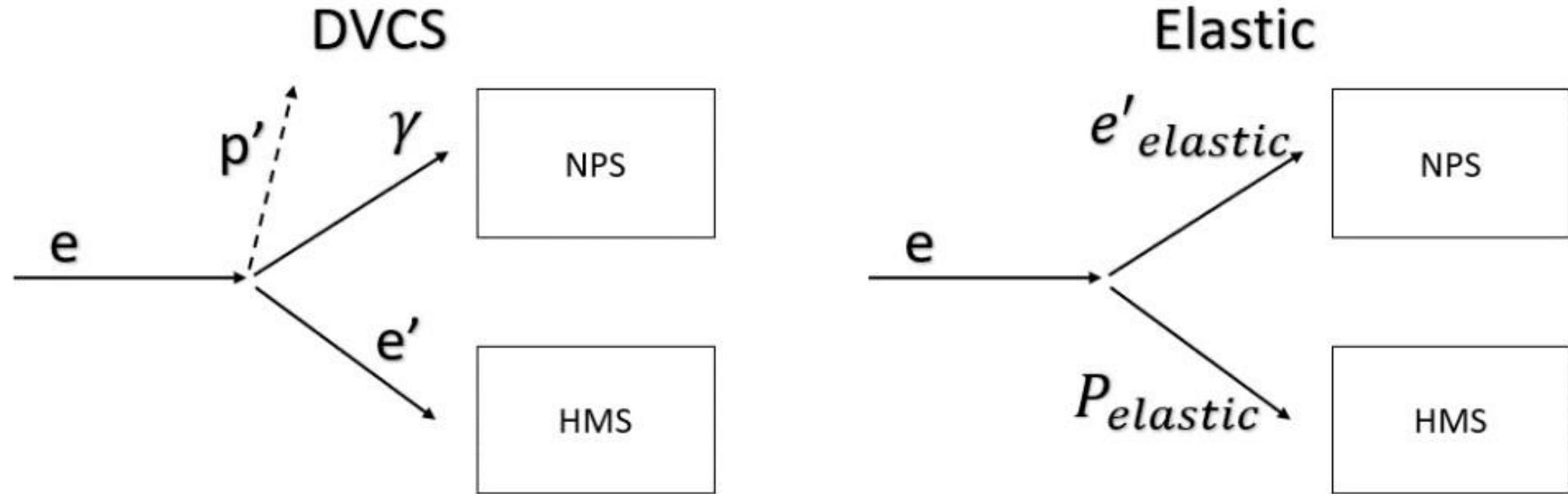
Energy Calibration of the NPS Calorimeter – Update

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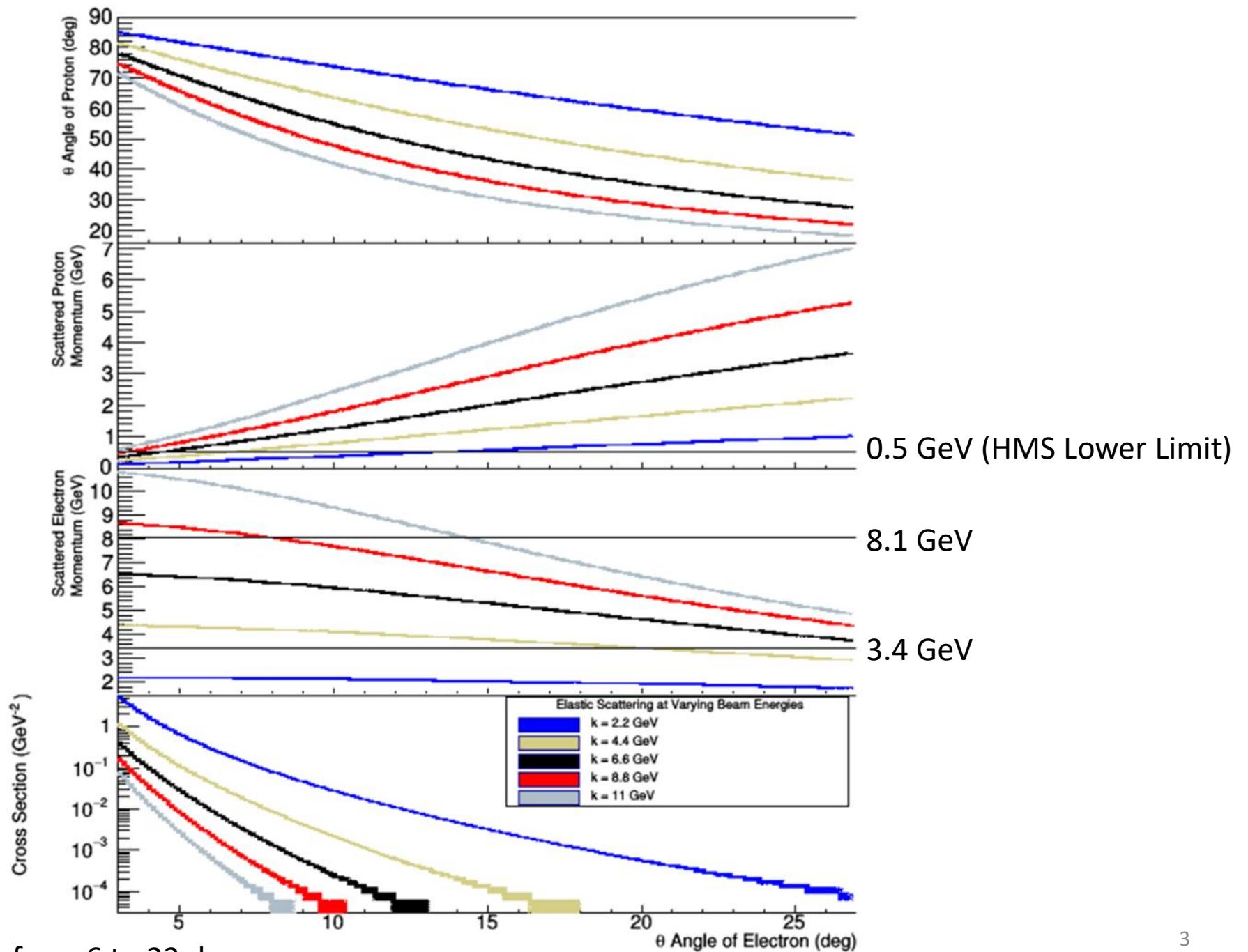
Ohio University

[https://wiki.jlab.org/cuawiki/images/9/9c/Energy Calibration of the NPS Calorimeter.pdf](https://wiki.jlab.org/cuawiki/images/9/9c/Energy_Calibration_of_the_NPS_Calorimeter.pdf)



Variable	Energy Dependence at fixed (Q^2, x_B)										Low- x_B			High- Q^2			
x_B	0.36				0.5			0.60				0.2			0.36		
Q^2 (GeV^2)	3.0			4.0		3.4		4.8	5.1			3.0	2.0		3.0	5.5	
k (GeV)	6.6	8.8	11	8.8	11	8.8	11	11	6.6	8.8	11	11	6.6	8.8	11	11	
k' (GeV)	2.2	4.4	6.6	2.9	5.1	5.2	7.4	5.9	2.1	4.3	6.5	5.7	1.3	3.5	5.7	3.0	2.9
q' (GeV)	4.4	4.4	4.4	5.8	5.8	3.4	3.4	4.9	4.2	4.2	4.2	5.0	5.3	5.3	8.0	8.1	

Tab. 2: Approved PAC 40 DVCS and π^0 kinematics for Hall C.



Note: Calorimeter θ angle ranges from 6 to 23 deg

Variable	Units	Kin2	Kin6	Kin11
k	GeV	4.4	6.6	8.8
k'	GeV	3.5	5.5	7.5
θ_e	deg	19.1	13.7	11
P	GeV	1.58	1.81	2.03
(θ_P)	deg	46.3	46	44.9
Rate	Events/sec	87	64	45
Rate per Block	$\times 10^{-2}$ Events/sec	24	25	22
Time to 1000 Events per Block	hrs	1.2	1.1	1.3
% Calorimeter in Coincidence	%	30	21	17

Note: Rates are calculated assuming 1 μ A beam current.