DVCS Kinematics

HRS_Acc	6.00E-03	sr			
HRS_ddelta	0.08	(kMax-kMin)/k0			
Calo_A	0.1386	m^2	208-54'	Crystals	3x3 cm^2
HMS_Acc	6.00E-03	sr			
HMS_ddelta	0.16	(kMax-kMin)/k0			
Calo_C	0.4096	m^2	34x34-4*33'	Crystals	2x2 cm^2
DeltaT	0.1	GeV^2			
nbarn	1.00E-33	cm^2/nb			

DVCS 3 kinematics
last update 02-10-16
original author: C. Hyde

		Hall A												
		kin_36_1	**kin_36_2**	**kin_36_3**	**kin_48_1**	**kin_48_2**	**kin_48_3**	**kin_48_4**	**kin_60_1**	**kin_60_2**	**kin_60_3**	**kin_60_4**		
		fall 14	**spring16**											
kBeam	(GeV)	6.60	8.80	11.00	4.40	8.80	8.80	11.00	8.80	8.80	11.00	11.00	kBeam	
Q2	(GeV^2)	3.20	4.00	4.75	2.70	4.35	5.65	7.00	5.50	6.10	7.70	9.00	Q2	
xBj		0.36	0.36	0.36	0.48	0.48	0.48	0.48	0.60	0.60	0.60	0.60	xBj	
MProton	(GeV)	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	MProton	
nu	(GeV)	4.74	5.92	7.03	3.00	4.83	6.27	7.77	4.89	5.42	6.84	8.00	nu	
kScatt	**(GeV)**	**1.86**	**2.88**	**3.97**	**1.40**	**3.97**	**2.53**	**3.23**	**3.91**	**3.38**	**4.16**	**3.00**	**kScatt**	
csThe		0.87	0.92	0.95	0.78	0.94	0.87	0.90	0.92	0.90	0.92	0.86	csThe	
epsilon		0.47	0.55	0.61	0.48	0.71	0.48	0.50	0.69	0.61	0.62	0.46	epsilon	
the	(deg)	29.57	22.93	18.99	38.64	20.33	29.20	25.66	23.05	26.17	23.67	30.25	the	
snThq		0.18	0.18	0.18	0.26	0.26	0.18	0.17	0.28	0.25	0.23	0.18	snThq	
Thq	**(deg)**	**10.45**	**10.33**	**10.10**	**14.83**	**15.19**	**10.58**	**9.80**	**16.42**	**14.50**	**13.07**	**10.21**	**Thq**	
pMin	(GeV/c)	0.42	0.42	0.42	0.62	0.62	0.62	0.62	0.89	0.89	0.89	0.89	pMin	
1./(1.-eps)		1.90	2.24	2.57	1.94	3.44	1.92	2.00	3.25	2.59	2.61	1.84	1./(1.-eps)	
qvec	(GeV/c)	5.06	6.25	7.36	3.42	5.26	6.71	8.21	5.42	5.96	7.38	8.54	qvec	
q'	(GeV)	4.65	5.83	6.94	2.83	4.65	6.09	7.58	4.53	5.06	6.47	7.62	q'	
tmin	(GeV^2)	-0.16	-0.17	-0.17	-0.32	-0.34	-0.35	-0.36	-0.66	-0.67	-0.69	-0.71	tmin	
sqrt(tmin)	(GeV)	0.40	0.41	0.41	0.57	0.59	0.59	0.60	0.81	0.82	0.83	0.84	sqrt(tmin)	
W2	(GeV^2)	6.57	7.99	9.32	3.80	5.59	7.00	8.46	4.55	4.95	6.01	6.88		
CaloDist		1.50	2.00	2.50	1.50	2.00	2.50	2.50	1.50	2.00	2.50	3.00	CaloDist	W2
DOmega		6.16E-02	3.47E-02	2.22E-02	6.16E-02	3.47E-02	2.22E-02	2.22E-02	6.16E-02	3.47E-02	2.22E-02	1.54E-02	DOmega	
Th_gg_max		1.24E-01	9.31E-02	7.45E-02	1.24E-01	9.31E-02	7.45E-02	7.45E-02	1.24E-01	9.31E-02	7.45E-02	6.20E-02	Th_gg_max	
q'_min		4.37	5.59	6.72	2.69	4.45	5.87	7.25	4.11	4.76	6.15	7.31	q'_min	
tmax		-0.69	-0.63	-0.59	-0.58	-0.72	-0.76	-0.98	-1.46	-1.24	-1.29	-1.28	tmax	
tmin-tmax		0.52	0.47	0.42	0.26	0.37	0.41	0.62	0.79	0.57	0.60	0.57	tmin-tmax	
Th_calo_edge	deg	4.72	6.03	6.66	9.10	10.89	7.15	6.36	10.69	10.20	9.64	7.34	Th_calo_edge	
Lumi		1.86E+37	3.31E+37	5.17E+37	1.86E+37	3.31E+37	5.17E+37	5.17E+37	1.86E+37	3.31E+37	5.17E+37	7.44E+37	Lumi	
d4sig(0deg)	nb/GeV^4	8.21E-02	3.64E-02	1.92E-02	1.24E-03	4.47E-03	2.33E-03	2.38E-03	1.22E-03	9.95E-04	5.06E-04	5.12E-04	d4sig(0deg)	
d4sig(180)	nb/GeV^4	1.44E-02	7.80E-03	4.69E-03	4.07E-03	1.73E-03	1.01E-03	1.06E-03	5.60E-04	4.68E-04	2.78E-04	2.95E-04	d4sig(180)	
Days	Approximative	3.00	2	1	5	4	4	7	13	16	13	20	Days	
Jacob_e	GeV	1.87	3.08	4.47	1.97	6.94	3.40	4.38	8.46	6.59	8.03	4.96	Jacob_e	
counts in DeltaT bin		3.88E+04	5.36E+04	4.53E+04	2.83E+03	4.68E+04	1.23E+04	3.64E+04	2.96E+04	3.57E+04	3.65E+04	3.71E+04	counts in DeltaT bin	
Total Beam Time		**Hall A Total = 88 PAC Days**											**Total Beam Time**	
Q1 nominal (A)		1400	2164	2983	1054	2985	1899	2426						
Q1 detune			0.88	0.64		0.64		0.78						
Q1 actual (A)		1400.00	1900	1900	1054	1900	1857	1900						
assumed max Q1 (A)	1900													
Q1 (A/GeV)	752													
assum max Q1 (GeV)	2.527													