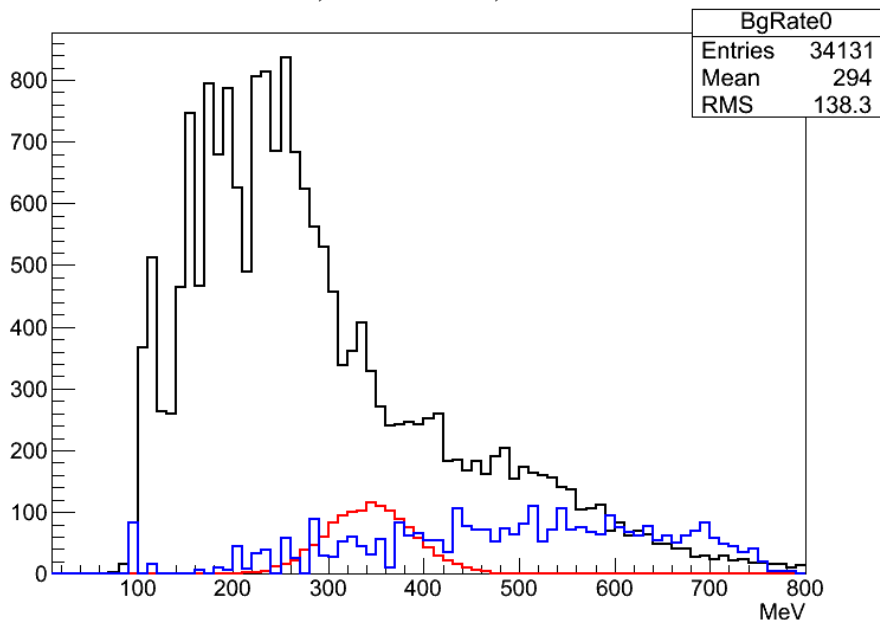


Background Rate Estimation

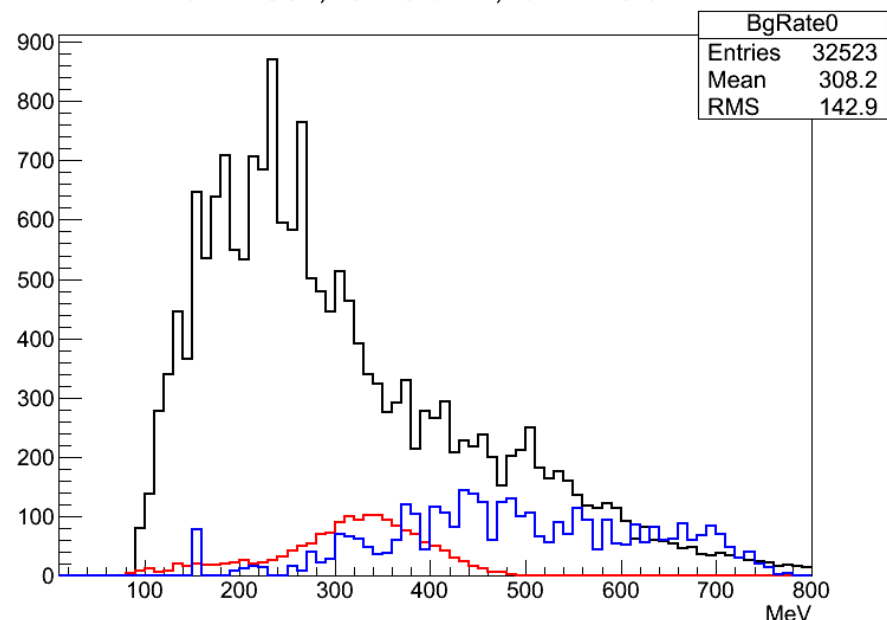
Assume DAQ rate = 10k Hz

Beam Energy/ GeV	Scat Angle/ deg	Asymmetry	Detector Rotation/ deg	Horizontal Offset/ mm	Vertical Offset/ mm	Elastic Rate	Target Bg Rate	Dump Bg Rate	Dilution Factor	Event Amount (3%)	Time(3%) /hour	Event Amount (5%)	Time(5%) /hour
Without Shielding at Target (ADC Cut 260-410MeV)													
1.159	69.5	0.023	18.0	0.0	130.0	1171.7	6038.0	432.1	0.1533	8.86E+08	32.2	3.19E+08	11.6
1.159	69.5	0.023	18.0	25.0	65.0	1143.6	6129.4	493.4	0.1473	9.60E+08	34.3	3.46E+08	12.4
1.159	69.5	0.023	18.0	50.0	0.0	1143.1	6246.4	561.2	0.1438	1.01E+09	35.2	3.63E+08	12.7
1.706	72.5	0.021	18.0	0.0	-210.0	1212.6	6173.0	512.0	0.1535	1.07E+09	37.6	3.85E+08	13.5
1.706	72.5	0.021	18.0	-35.0	-105.0	1195.7	6190.0	539.2	0.1509	1.11E+09	38.8	3.99E+08	14.0
1.706	72.5	0.021	18.0	-70.0	0.0	1151.6	6166.1	670.9	0.1442	1.21E+09	42.2	4.37E+08	15.2
2.257	74.3	0.017	36.0	0.0	-120.0	1250.9	7414.0	573.2	0.1354	5.82E+08	17.5	2.10E+08	6.3
2.257	74.3	0.017	36.0	-45.0	-60.0	1219.9	7390.3	692.9	0.1311	6.21E+08	18.5	2.24E+08	6.7
2.257	74.3	0.017	36.0	-90.0	0.0	1204.6	6997.7	849.8	0.1331	6.03E+08	18.5	2.17E+08	6.7
With 2mm Al Shielding at Target (ADC Cut 260-410MeV)													
1.159	69.5	0.023	18.0	0.0	130.0	980.3	4356.0	432.1	0.1699	7.21E+08	34.7	2.60E+08	12.5
1.159	69.5	0.023	18.0	25.0	65.0	966.4	4220.9	493.4	0.1701	7.19E+08	35.2	2.59E+08	12.7
1.159	69.5	0.023	18.0	50.0	0.0	953.5	4321.2	561.2	0.1634	7.80E+08	37.1	2.81E+08	13.4
1.706	72.5	0.021	18.0	0.0	-210.0	1042.0	4474.6	512.0	0.1728	8.44E+08	38.9	3.04E+08	14.0
1.706	72.5	0.021	18.0	-35.0	-105.0	1045.2	4689.8	539.2	0.1666	9.09E+08	40.2	3.27E+08	14.5
1.706	72.5	0.021	18.0	-70.0	0.0	1003.9	4758.9	670.9	0.1560	1.04E+09	44.7	3.73E+08	16.1
2.257	74.3	0.017	36.0	0.0	-120.0	1053.2	5265.4	573.2	0.1528	4.57E+08	18.4	1.65E+08	6.6
2.257	74.3	0.017	36.0	-45.0	-60.0	1031.1	5075.8	692.9	0.1516	4.64E+08	19.0	1.67E+08	6.8
2.257	74.3	0.017	36.0	-90.0	0.0	1026.2	5327.6	849.8	0.1425	5.26E+08	20.3	1.89E+08	7.3

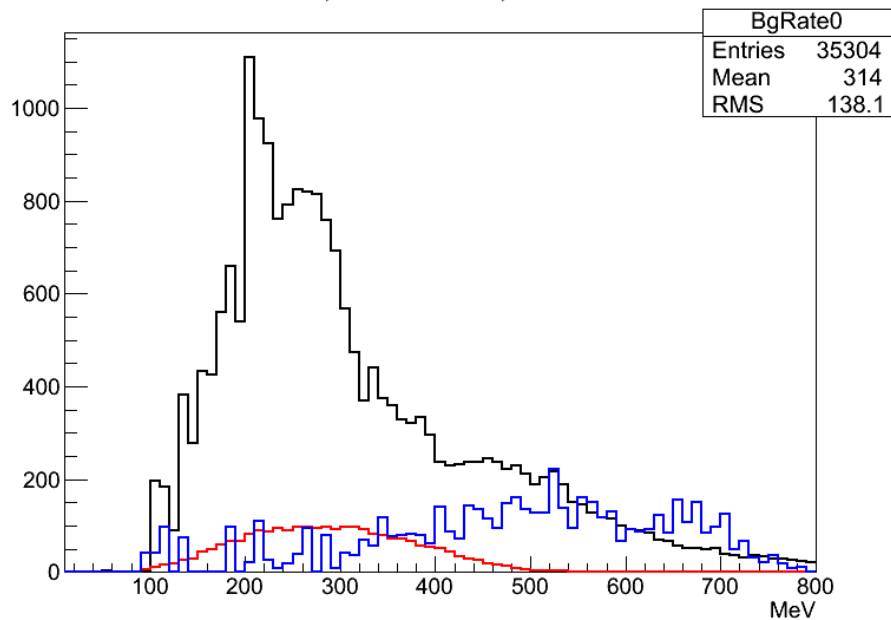
Eb=1.2GeV,Hoff=0.0mm,Voff=130.0mm



Eb=1.7GeV,Hoff=0.0mm,Voff=-210.0mm



Eb=2.3GeV,Hoff=0.0mm,Voff=-120.0mm



Black: Target Background
Blue: Local dump Background
Red: Elastic Signal