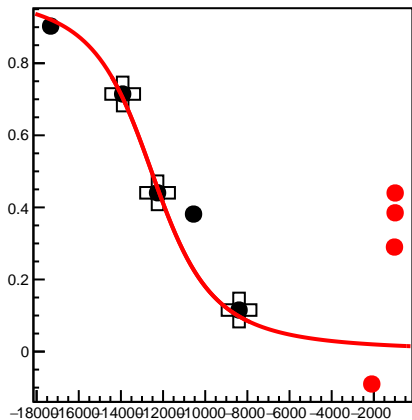
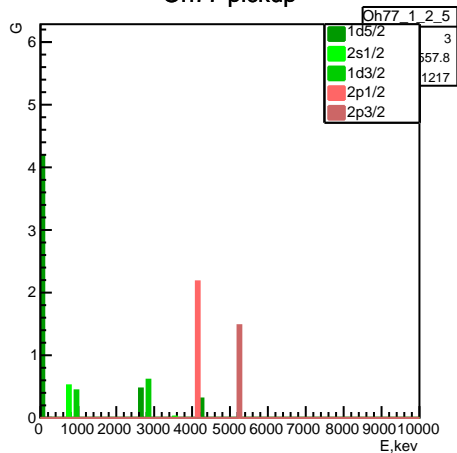
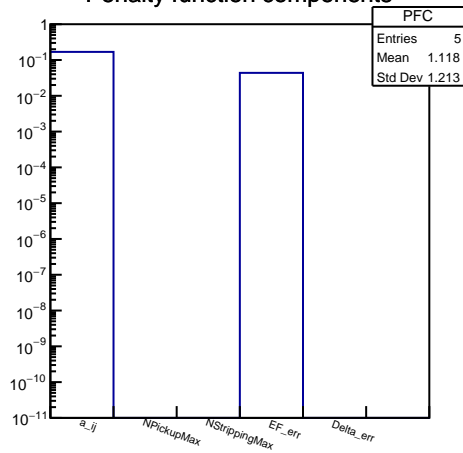


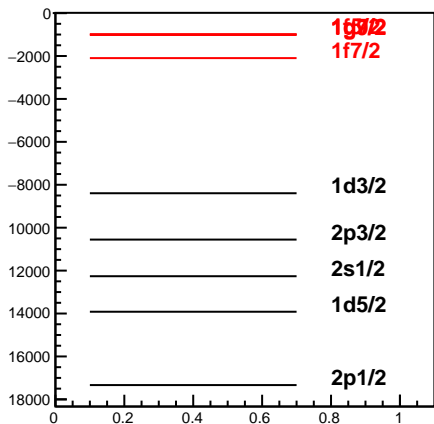
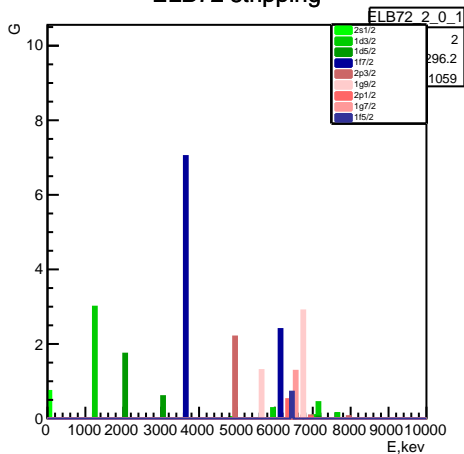
Oh77 pickup



Penalty function components



ELB72 stripping



Experiment: Oh77 (9) ELB72 (24)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

 $E_F: -12549.2 \pm 121.115$ keV $\Delta: 3065.13 \pm 353.715$ keV

penalty: 0.0424345

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-13916.4 1d5/2 0.714667 1.22733

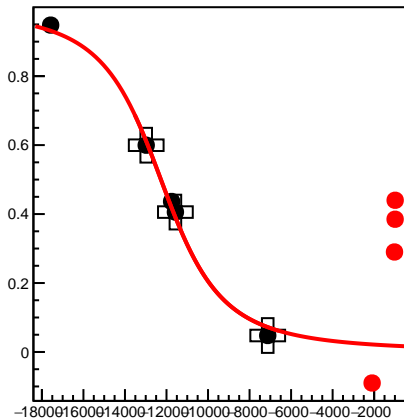
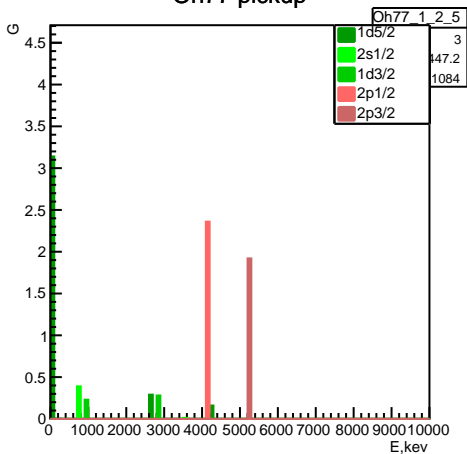
-12261.7 2s1/2 0.4405 0.661

-8395.01 1d3/2 0.11525 1.2945

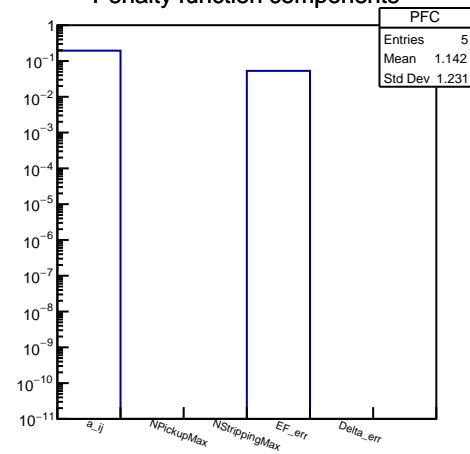
-17333.9 2p1/2 0.903 1.374

-10554.4 2p3/2 0.3815 0.977

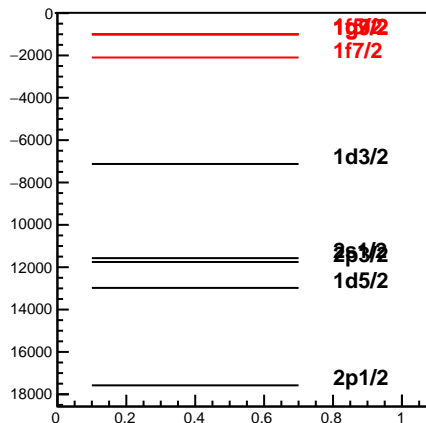
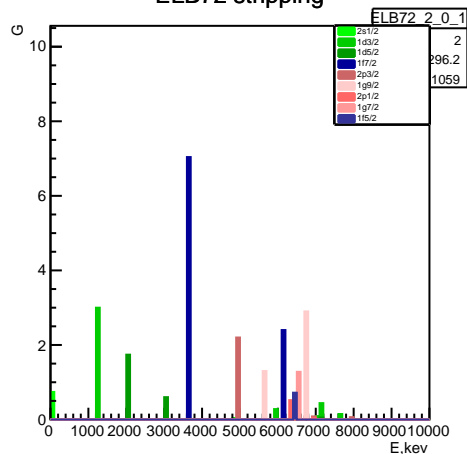
Oh77 pickup



Penalty function components



ELB72 stripping



Experiment: Oh77 (9) ELB72 (24)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

 $E_F: -12268.4 \pm 146.835$ keV $\Delta: -3106.8 \pm 476.009$ keV

penalty: 0.0495021

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-12976.9 1d5/2 0.599667 0.997333

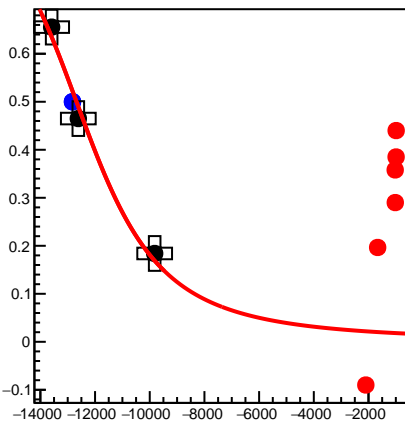
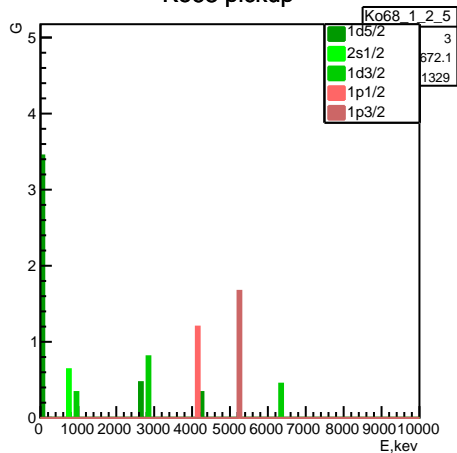
-11571.2 2s1/2 0.40575 0.5915

-7125.05 1d3/2 0.04775 1.1595

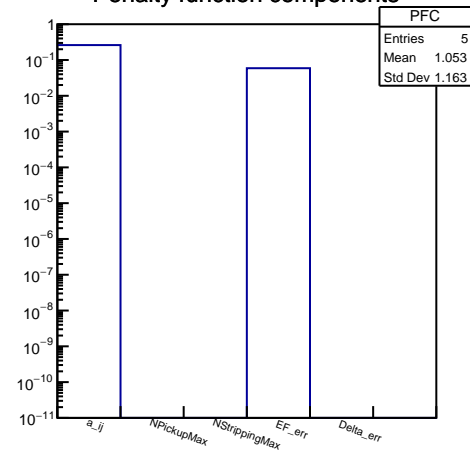
-17578.7 2p1/2 0.948 1.464

-11753.7 2p3/2 0.4365 1.087

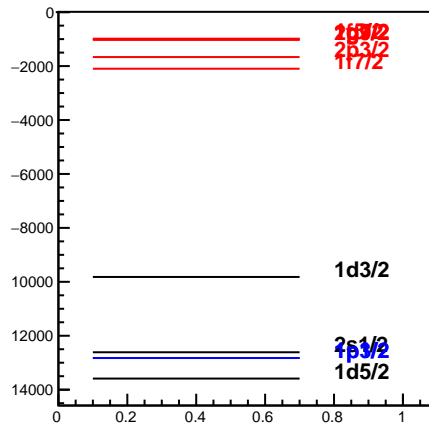
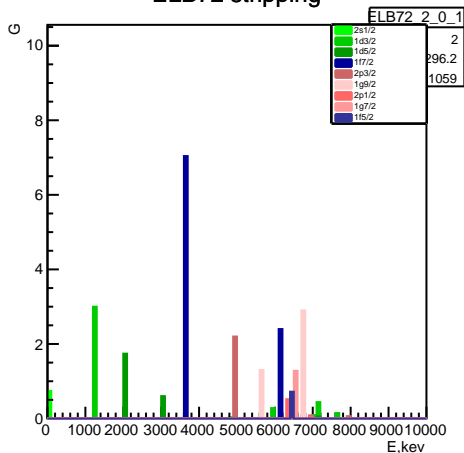
Ko68 pickup



Penalty function components



ELB72 stripping



Experiment: Ko68 (9) ELB72 (24)

neutron transfer

n separation energy A:17178.6, A+1: 8472.8

 $E_F: -12679.6 \pm 163.467$ keV $\Delta: -3235.41 \pm 529.903$ keV

penalty: 0.0640352

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-13587.6 1d5/2 0.6555 1.109

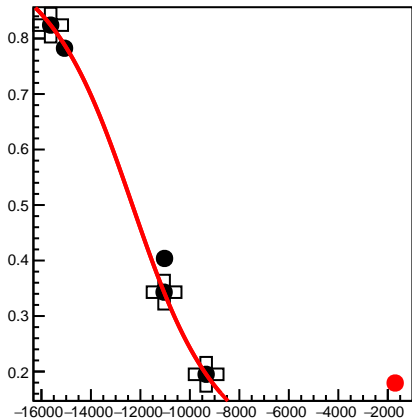
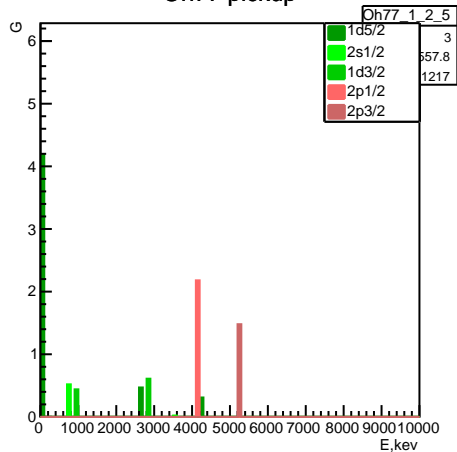
-12612.2 2s1/2 0.465 0.71

-9819.85 1d3/2 0.184 1.432

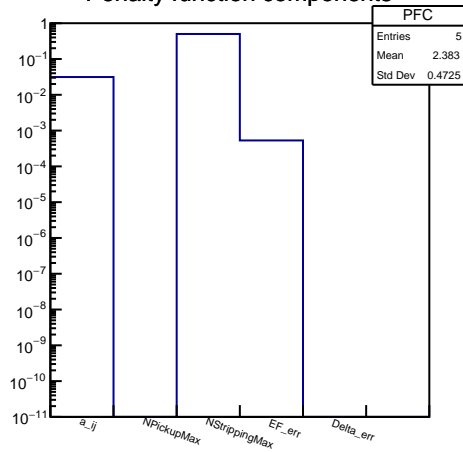
-12825.7 1p1/2 0.5 1.2

-12825.7 1p3/2 0.5 0.835

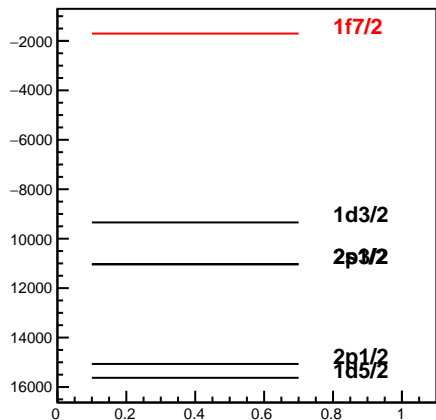
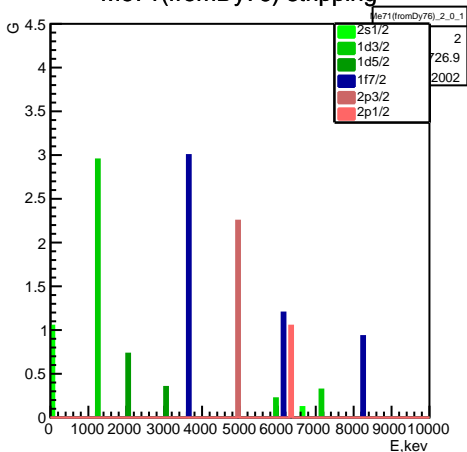
Oh77 pickup



Penalty function components

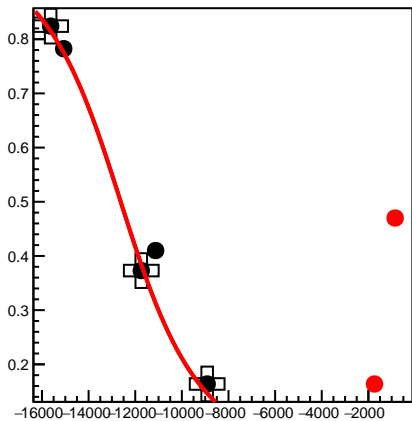
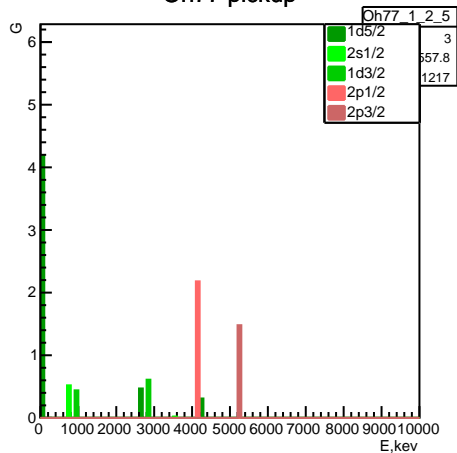


Me71(fromDy76) stripping

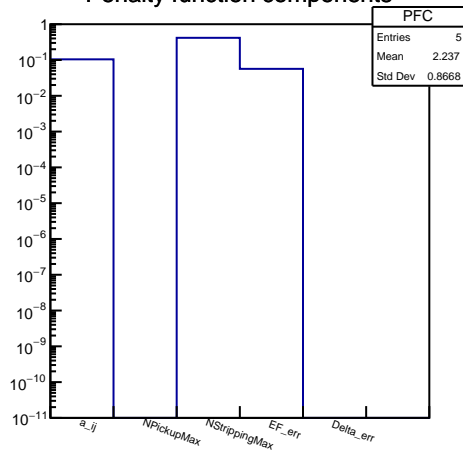


Experiment: Oh77 (9) Me71(fromDy76) (12)
 neutron transfer
 n separation energy A:17178.6, A+1: 8472.87
 E_F: -12326.1 ± 1.46932 keV
 Δ: 3876.7 ± 2.6232 keV
 penalty: 0.10638
 SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$
 -15627.8 1d5/2 0.824167 1.00833
 -11042.4 2s1/2 0.343 0.856
 -9342.58 1d3/2 0.195 1.135
 -15067.2 2p1/2 0.7825 1.615
 -11024.5 2p3/2 0.40375 0.9325

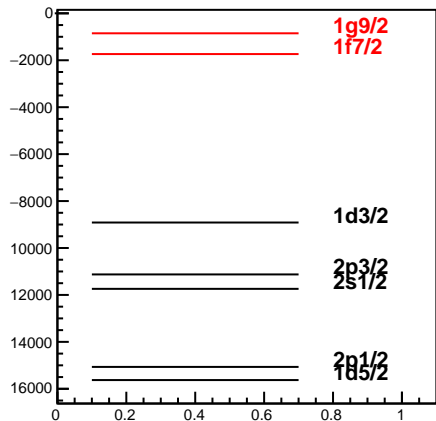
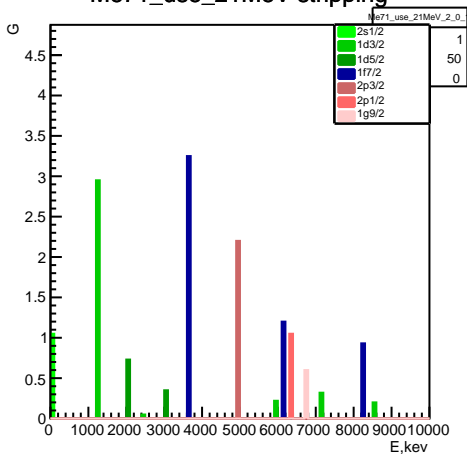
Oh77 pickup



Penalty function components



Me71_use_21MeV stripping



Experiment: Oh77 (9) Me71_use_21MeV (14)

neutron transfer

n separation energy A:17178.6, A+1: 8472.8

E_F: -12622.3 ± 156.769 keV

Δ: 3709.96 ± 309.49 keV

penalty: 0.115521

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-15627.8 1d5/2 0.824167 1.00833

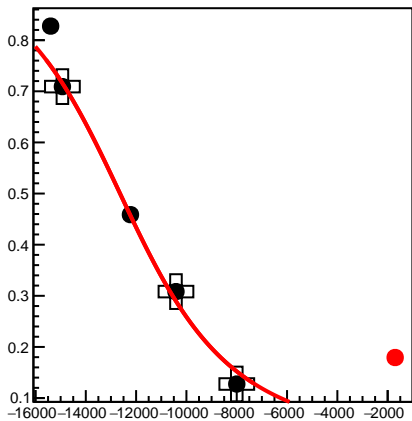
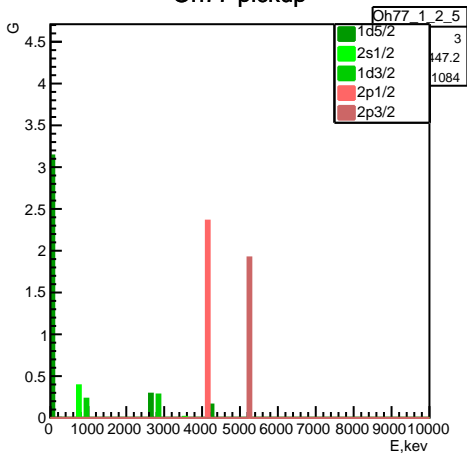
-11740.8 2s1/2 0.373 0.796

-8914.55 1d3/2 0.16375 1.1975

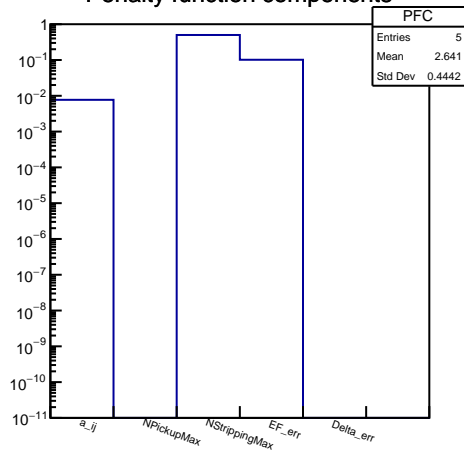
-15067.2 2p1/2 0.7825 1.615

-11126.2 2p3/2 0.41 0.92

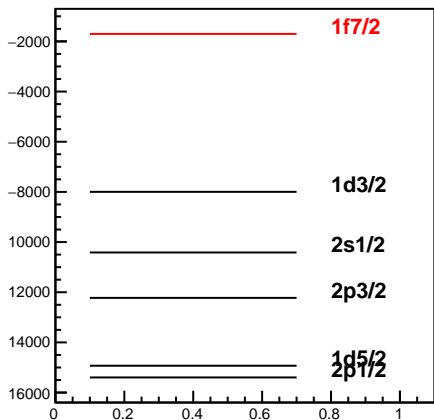
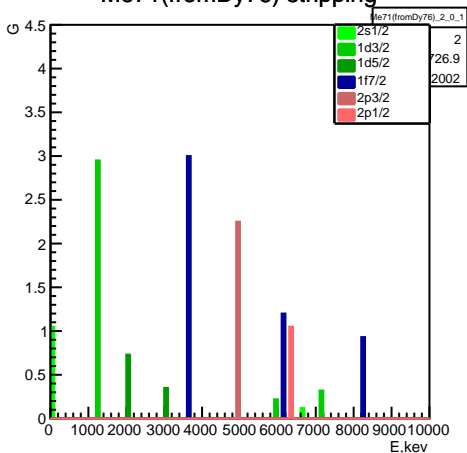
Oh77 pickup



Penalty function components



Me71(fromDy76) stripping



Experiment: Oh77 (9) Me71(fromDy76) (12)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

E_F: -12638.1 \pm 281.403 keV Δ : -4789.34 \pm 498.176 keV

penalty: 0.121854

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-14929.7 1d5/2 0.709167 0.778333

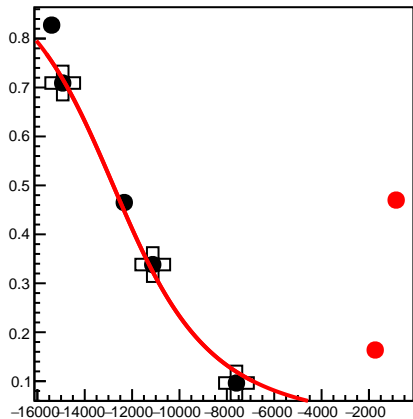
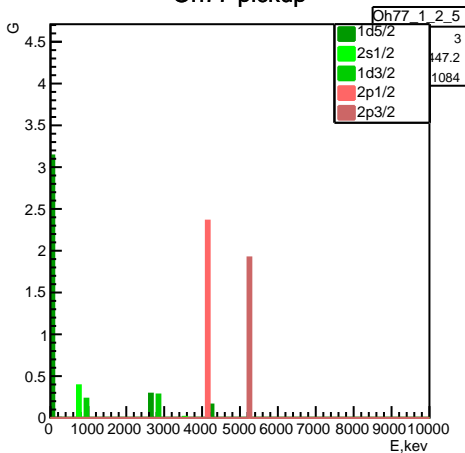
-10415.3 2s1/2 0.30825 0.7865

-7997.99 1d3/2 0.1275 1

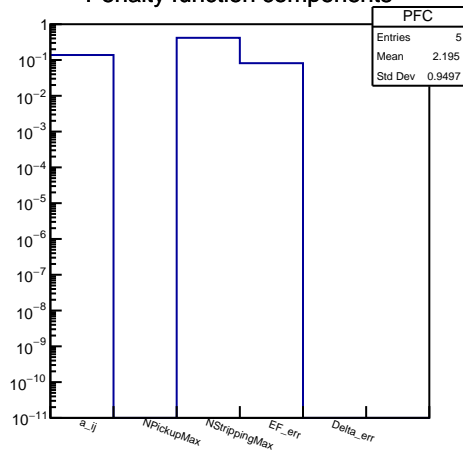
-15397.1 2p1/2 0.8275 1.705

-12225.4 2p3/2 0.45875 1.0425

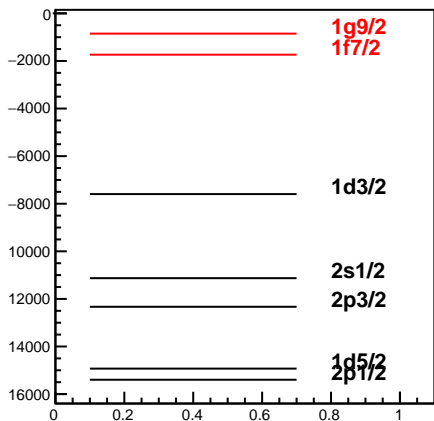
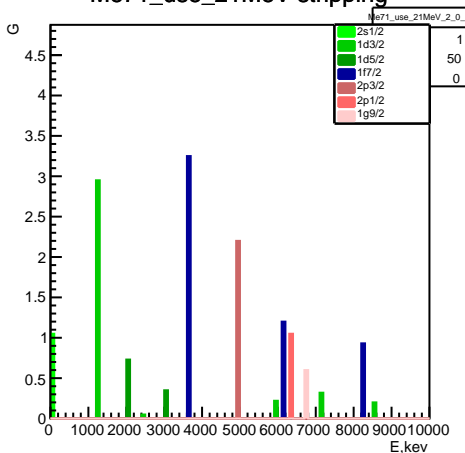
Oh77 pickup



Penalty function components



Me71_use_21MeV stripping



Experiment: Oh77 (9) Me71_use_21MeV (14)

neutron transfer

n separation energy A:17178.6, A+1: 8472.8

 $E_F: -12797.4 \pm 225.796$ keV $\Delta: -4425.26 \pm 434.368$ keV

penalty: 0.127204

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-14929.7 1d5/2 0.709167 0.778333

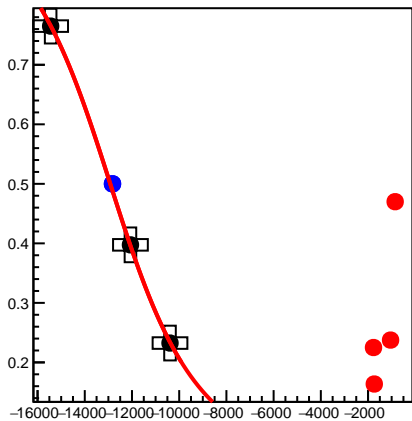
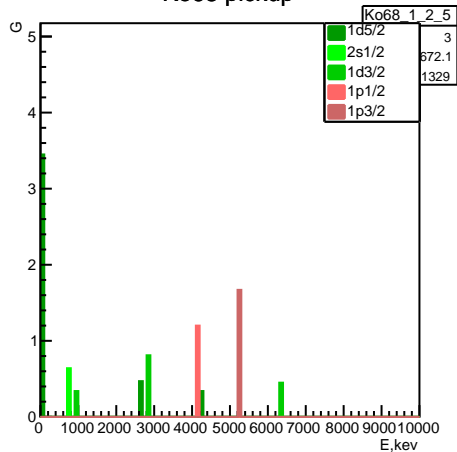
-11128.7 2s1/2 0.33825 0.7265

-7594.66 1d3/2 0.09625 1.0625

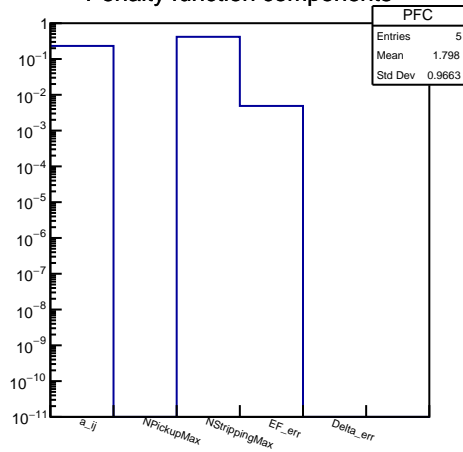
-15397.1 2p1/2 0.8275 1.705

-12330.8 2p3/2 0.465 1.03

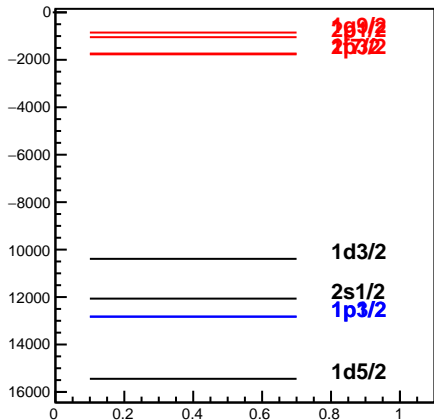
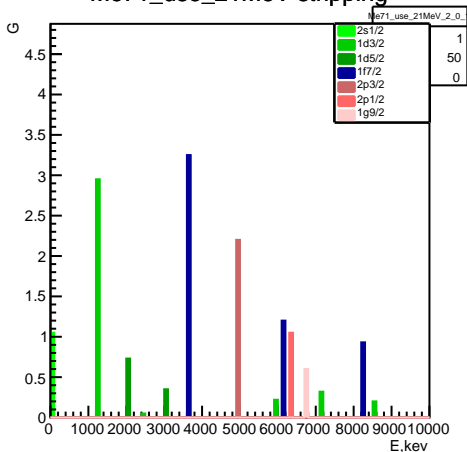
Ko68 pickup



Penalty function components



Me71_use_21MeV stripping



Experiment: Ko68 (9) Me71_use_21MeV (14)

neutron transfer

n separation energy A:17178.6, A+1: 8472.8

 $E_F: -12920.5 \pm 13.5246 \text{ keV}$ $\Delta: -4025.98 \pm 29.8653 \text{ keV}$

penalty: 0.130696

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-15445.7 1d5/2 0.765 0.89

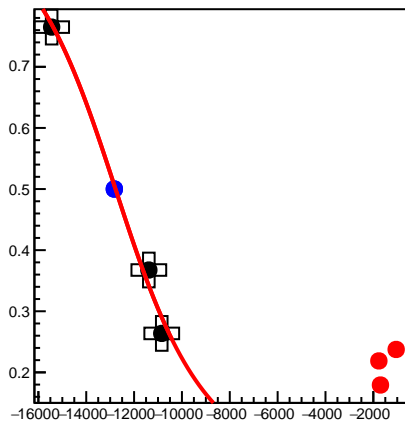
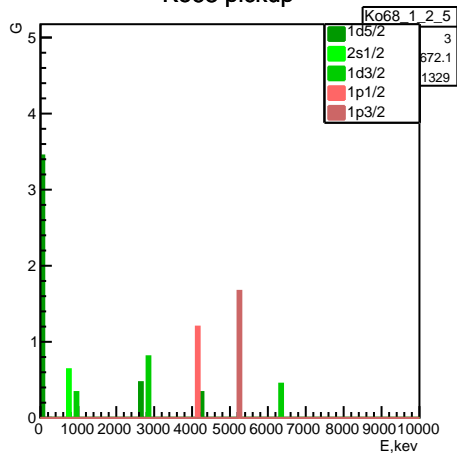
-12065.4 2s1/2 0.3975 0.845

-10389.4 1d3/2 0.2325 1.335

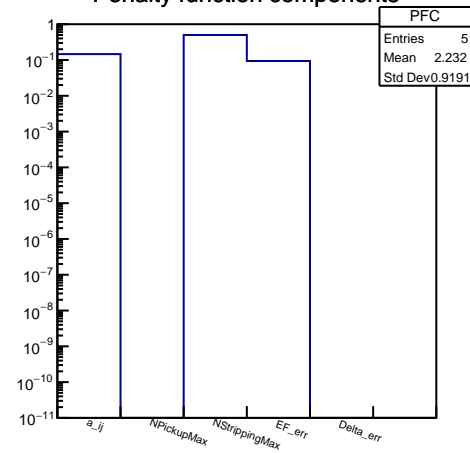
-12825.7 1p1/2 0.5 1.2

-12825.7 1p3/2 0.5 0.835

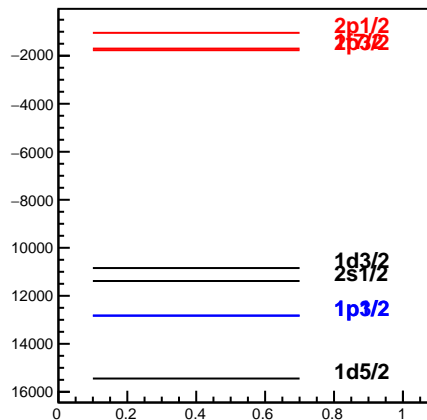
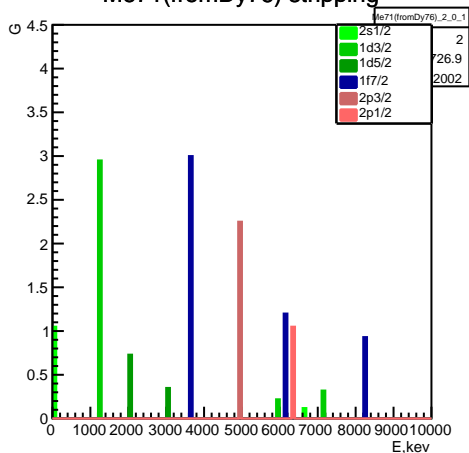
Ko68 pickup



Penalty function components



Me71(fromDy76) stripping



Experiment: Ko68 (9) Me71(fromDy76) (12)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

E_F: -12776 ± 260.027 keV

Δ: 4173.18 ± 563.813 keV

penalty: 0.147984

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-15445.7 1d5/2 0.765 0.89

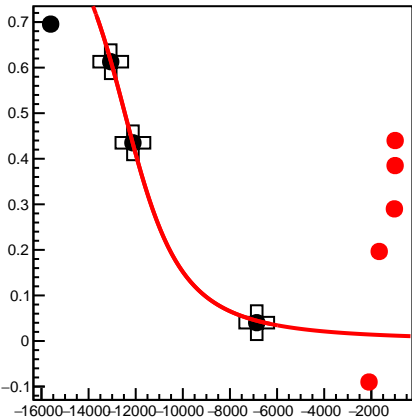
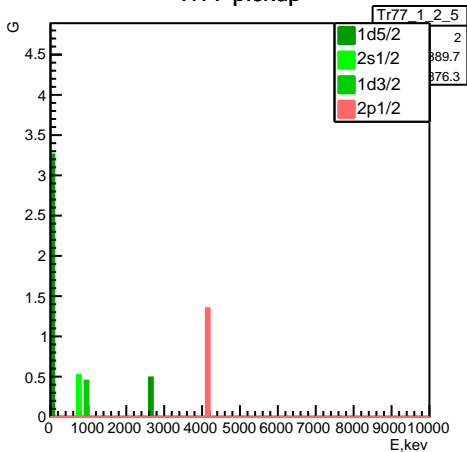
-11383.3 2s1/2 0.3675 0.905

-10843.6 1d3/2 0.26375 1.2725

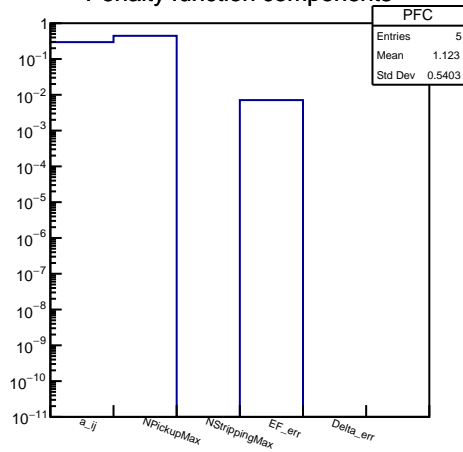
-12825.7 1p1/2 0.5 1.2

-12825.7 1p3/2 0.5 0.835

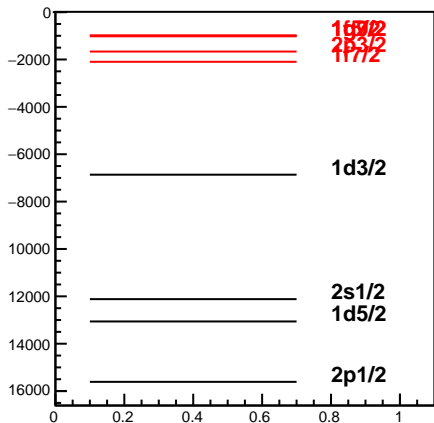
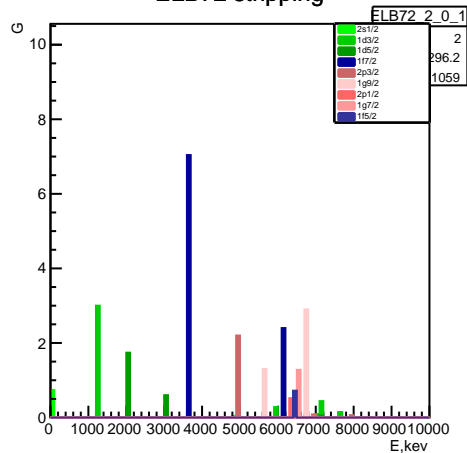
Tr77 pickup



Penalty function components



ELB72 stripping



Experiment: Tr77 (5) ELB72 (24)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

 $E_F: -12462 \pm 19.6936 \text{ keV}$ $\Delta: 2536.03 \pm 87.0493 \text{ keV}$

penalty: 0.149544

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-13060.8 1d5/2 0.613 1.024

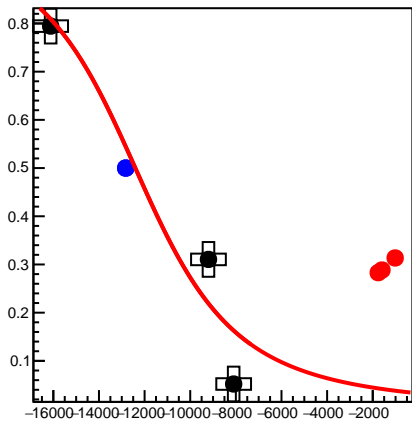
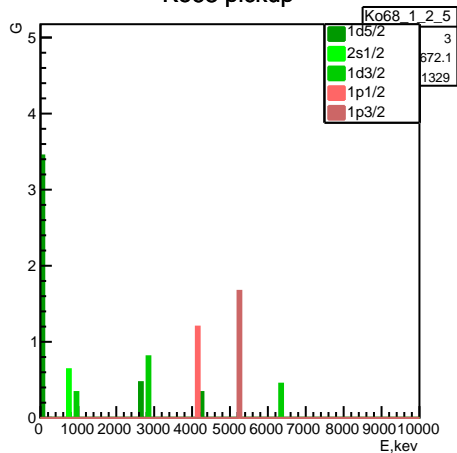
-12118.6 2s1/2 0.435 0.65

-6863.99 1d3/2 0.04025 1.1445

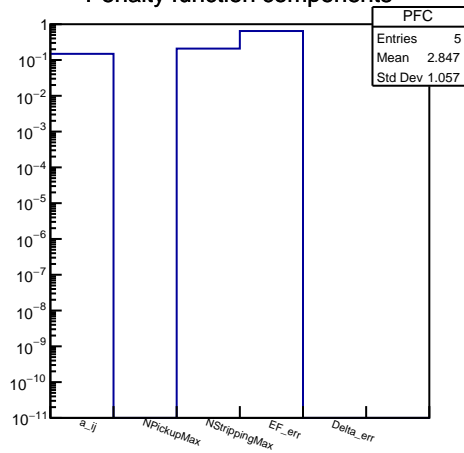
-15610.4 2p1/2 0.6955 0.959

-2097.67 1f7/2 -0.09 1.18

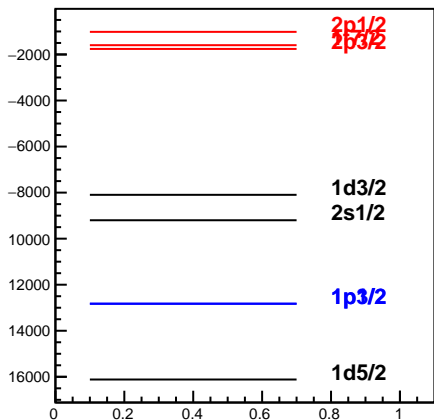
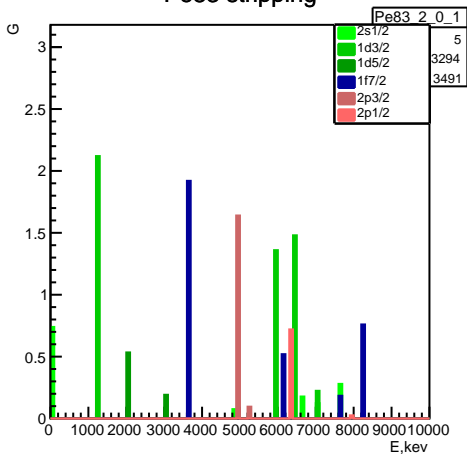
Ko68 pickup



Penalty function components



Pe83 stripping



Experiment: Ko68 (9) Pe83 (19)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

E_F: -12405.4 \pm 1788.09 keV Δ : 4718.5 \pm 2182.59 keV

penalty: 0.200454

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-16117.7 1d5/2 0.7945 0.831

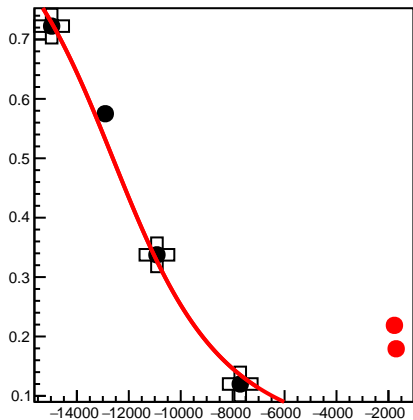
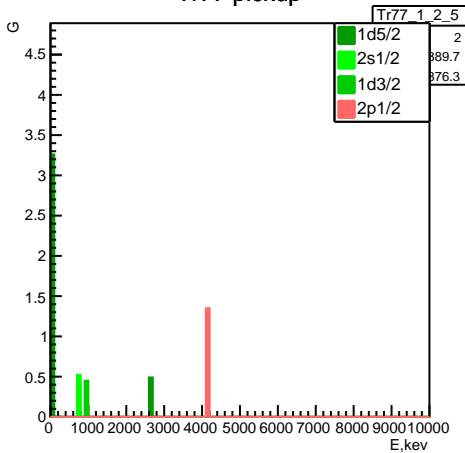
-9200.44 2s1/2 0.3105 1.019

-8096.03 1d3/2 0.052 1.696

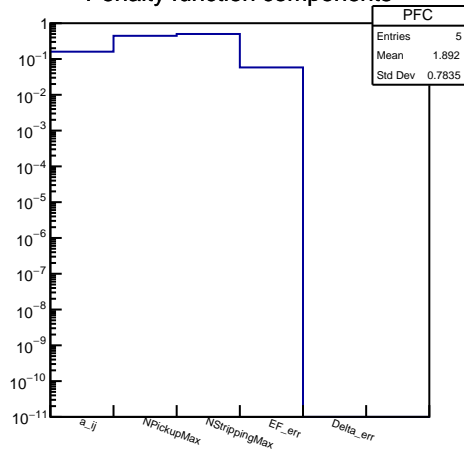
-12825.7 1p1/2 0.5 1.2

-12825.7 1p3/2 0.5 0.835

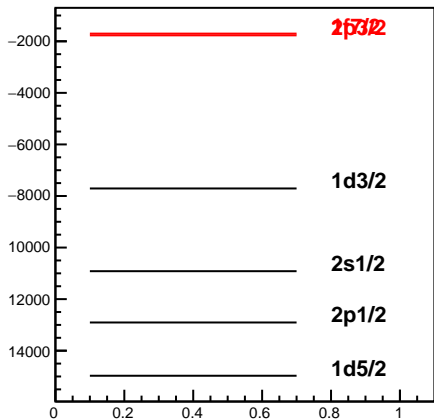
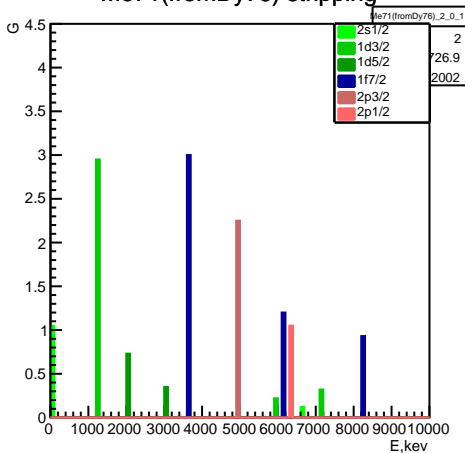
Tr77 pickup



Penalty function components

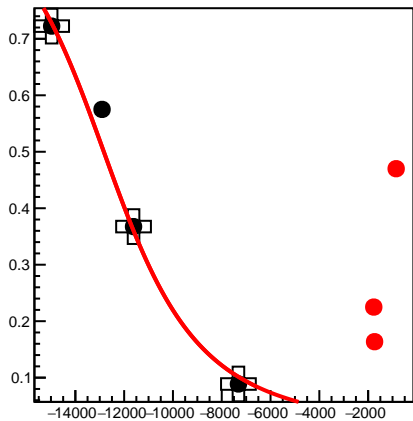
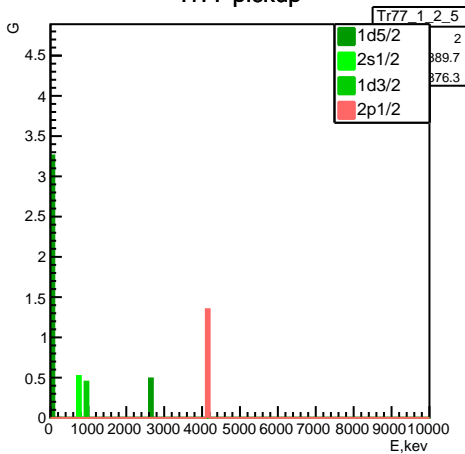


Me71(fromDy76) stripping

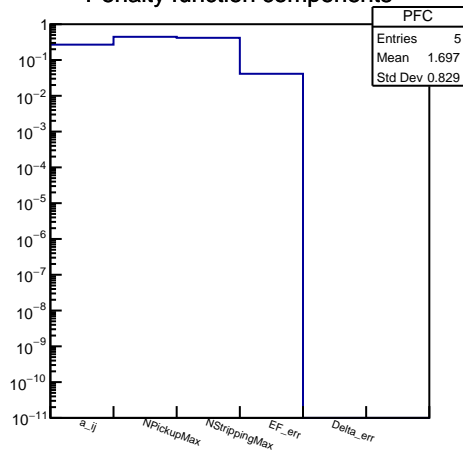


Experiment: Tr77 (5) Me71(fromDy76) (12)
neutron transfer
n separation energy A:17178.6, A+1: 8472.87
E_F: -12615 ± 161.085 keV
Δ: -4603.29 ± 306.246 keV
penalty: 0.232553
SPE, keV nlj OCC $\frac{G^+ + G^-}{2J+1}$
-14971.8 1d5/2 0.7225 0.805
-10916.4 2s1/2 0.3375 0.845
-7707.94 1d3/2 0.12 0.985
-12905.9 2p1/2 0.575 1.2
-1702.35 1f7/2 0.179312 0.641375

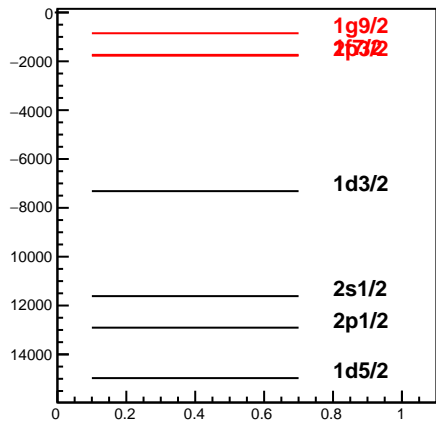
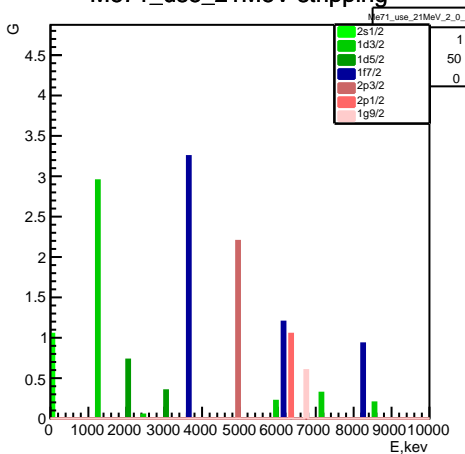
Tr77 pickup



Penalty function components



Me71_use_21MeV stripping



Experiment: Tr77 (5) Me71_use_21MeV (14)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

 $E_F: -12833.2 \pm 114.118$ keV $\Delta: 4180.9 \pm 242.271$ keV

penalty: 0.23417

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-14971.8 1d5/2 0.7225 0.805

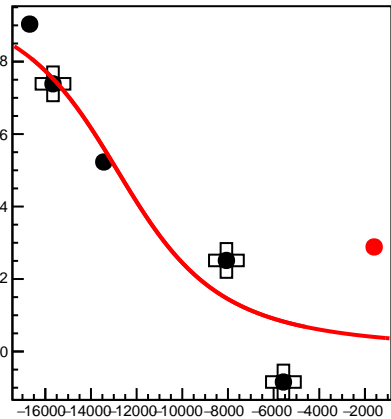
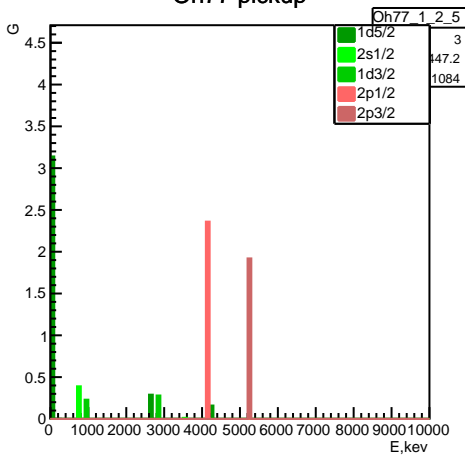
-11614.9 2s1/2 0.3675 0.785

-7316.14 1d3/2 0.08875 1.0475

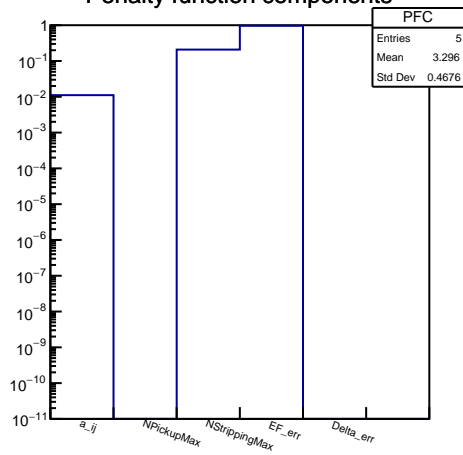
-12905.9 2p1/2 0.575 1.2

-1736.04 1f7/2 0.163687 0.672625

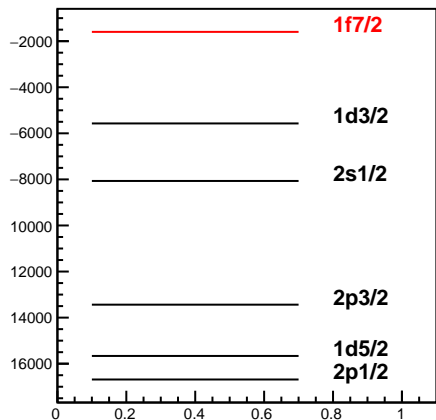
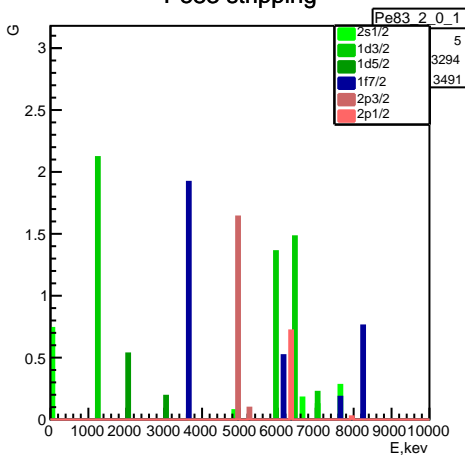
Oh77 pickup



Penalty function components



Pe83 stripping



Experiment: Oh77 (9) Pe83 (19)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

E_F: -12848.2 ± 2674.81 keV

Δ: 4800.63 ± 3055.29 keV

penalty: 0.236954

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-15663.7 1d5/2 0.738667 0.719333

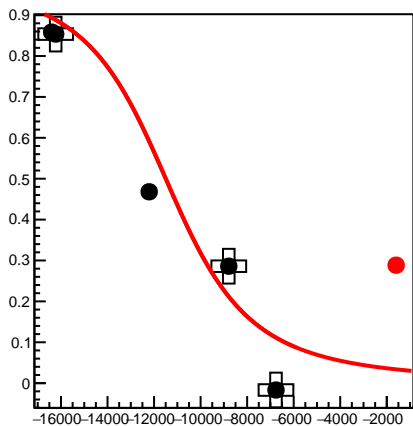
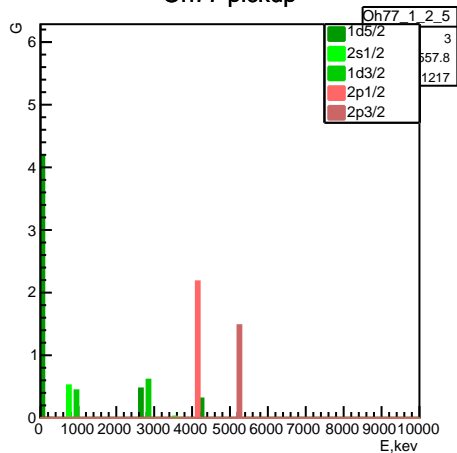
-8067.72 2s1/2 0.25125 0.9005

-5571.01 1d3/2 -0.08425 1.4235

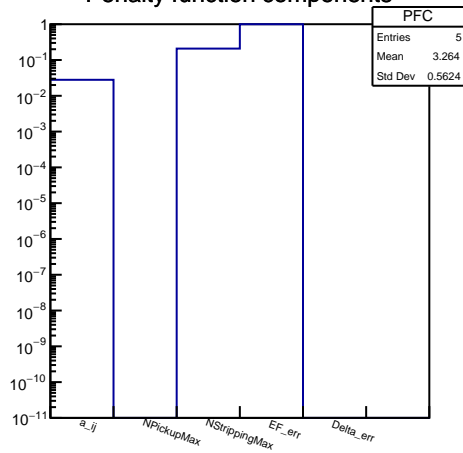
-16685.8 2p1/2 0.9035 1.553

-13437.5 2p3/2 0.523 0.914

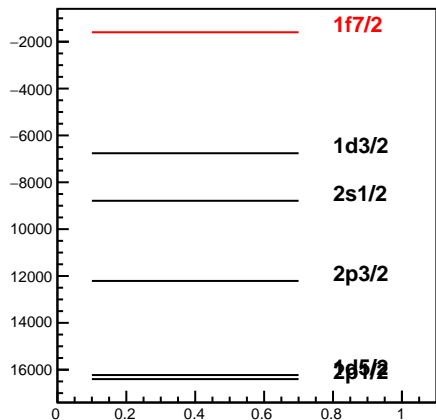
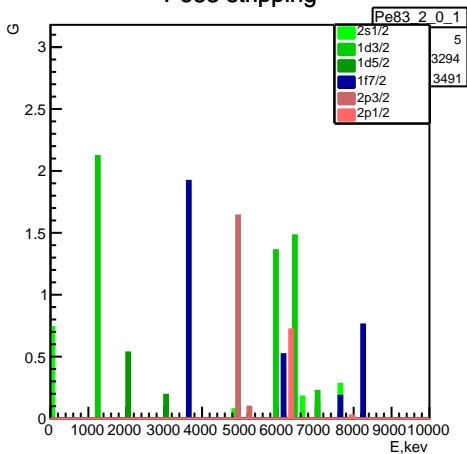
Oh77 pickup



Penalty function components



Pe83 stripping



Experiment: Oh77 (9) Pe83 (19)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

E_F: -11497.3 ± 2770.9 keV

Δ: 3834.8 ± 2737.05 keV

penalty: 0.247261

SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-16227.3 1d5/2 0.853667 0.949333

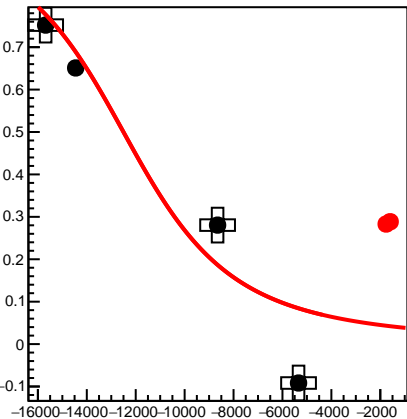
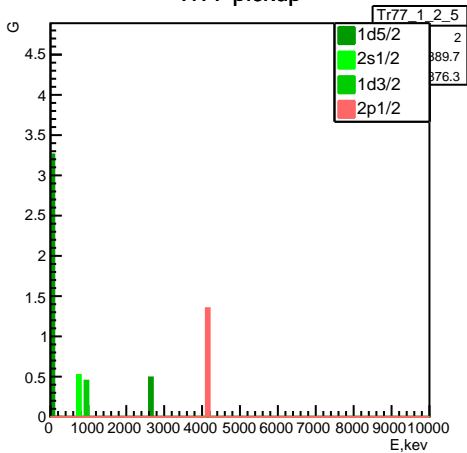
-8789.27 2s1/2 0.286 0.97

-6760.46 1d3/2 -0.01675 1.5585

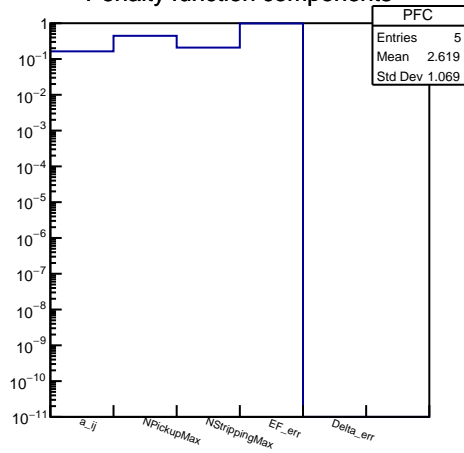
-16400.9 2p1/2 0.8585 1.463

-12210.6 2p3/2 0.468 0.804

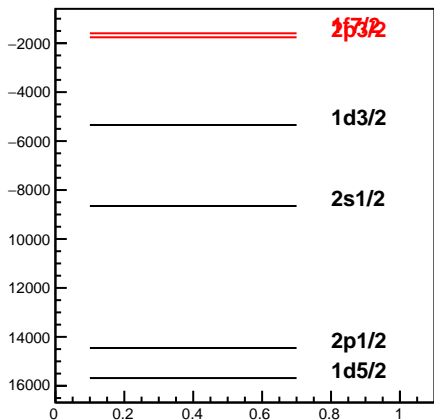
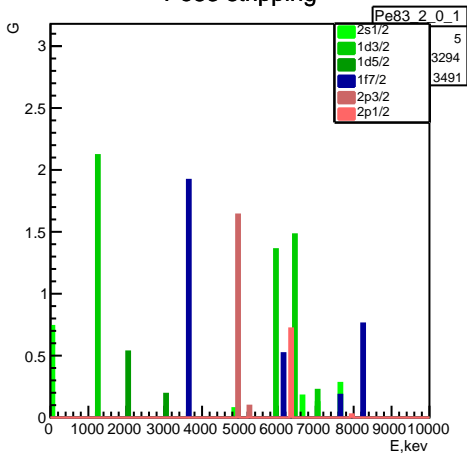
Tr77 pickup



Penalty function components



Pe83 stripping



Experiment: Tr77 (5) Pe83 (19)

neutron transfer

n separation energy A:17178.6, A+1: 8472.87

E_F: -12501.2 ± 2733.54 keV

Δ: 4786.74 ± 2904.43 keV

penalty: 0.360576

SPE, keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-15682.8 1d5/2 0.752 0.746

-8652.43 2s1/2 0.2805 0.959

-5342.33 1d3/2 -0.09175 1.4085

-14454.3 2p1/2 0.651 1.048

-1596.51 1f7/2 0.2885 0.423