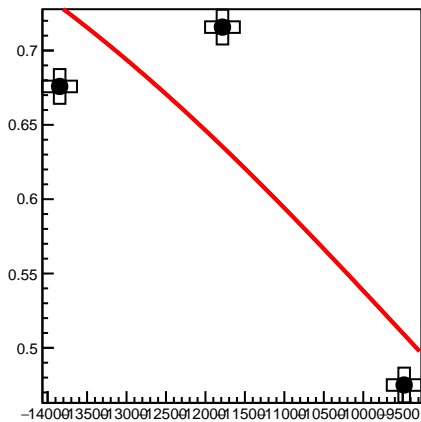
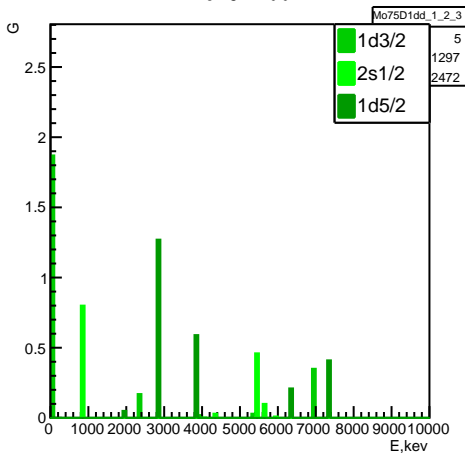
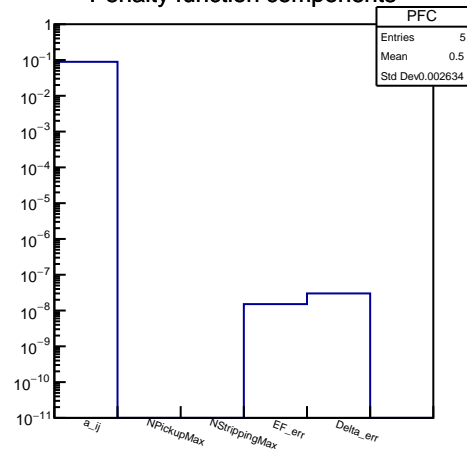


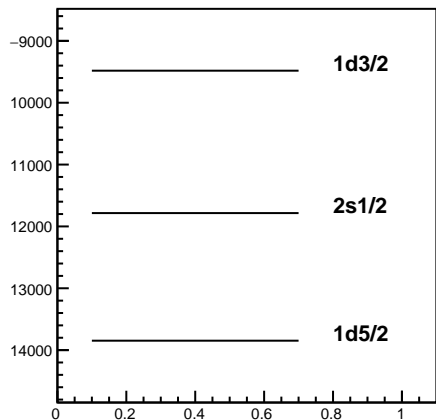
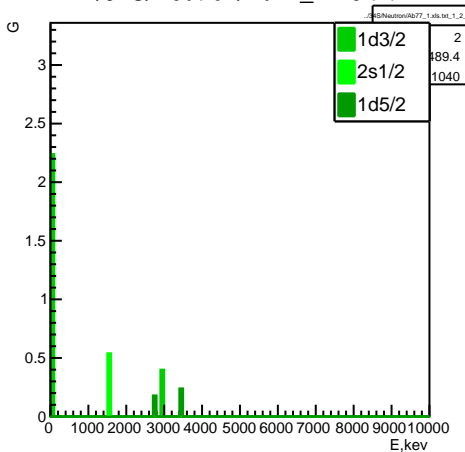
Mo75D1dd



Penalty function components



../34S/Neutron/Ab77_1.xls.txt



Experiment: Mo75D1dd (16) ../34S/Neutron/
neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -9326.64 ± 1776.18 keV

Δ: 8736.37 ± 6372.53 keV

penalty: 0.0177889

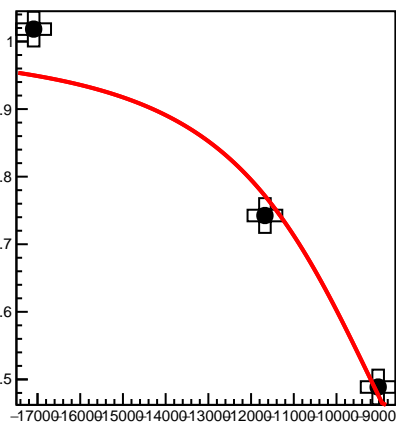
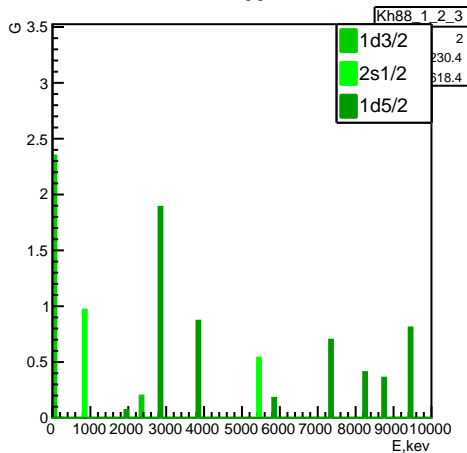
SPE, keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9481.9 1d3/2 0.475 1.27

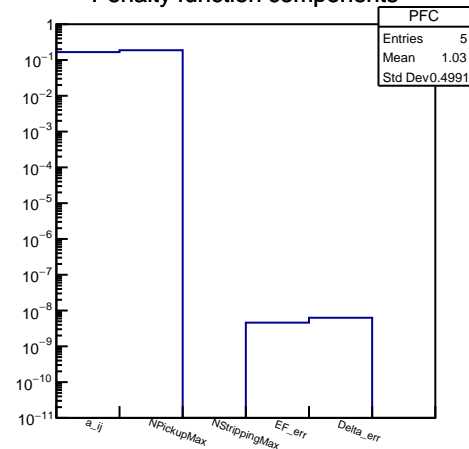
-11784.4 2s1/2 0.71575 0.9715

-13847.6 1d5/2 0.675833 0.491667

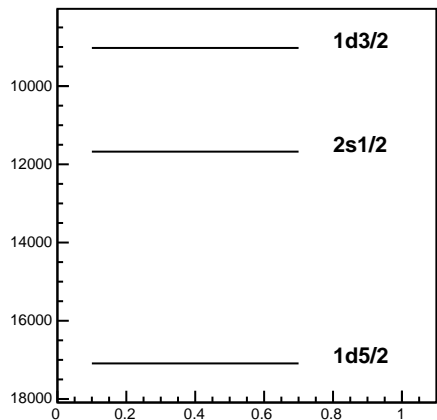
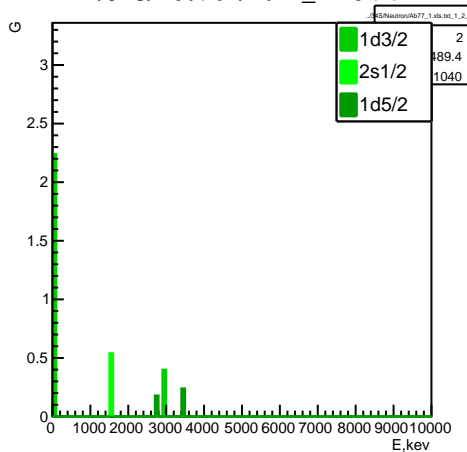
Kh88



Penalty function components



../34S/Neutron/Ab77_1.xls.txt



Experiment: Kh88 (13) ../34S/Neutron/Ab77_
neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -9200.54 \pm 539.002 keV

Δ : -3824.78 \pm 1331.93 keV

penalty: 0.0707778

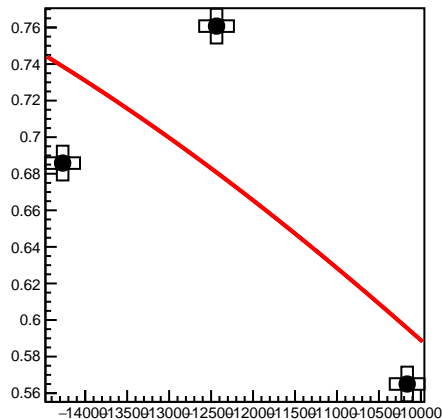
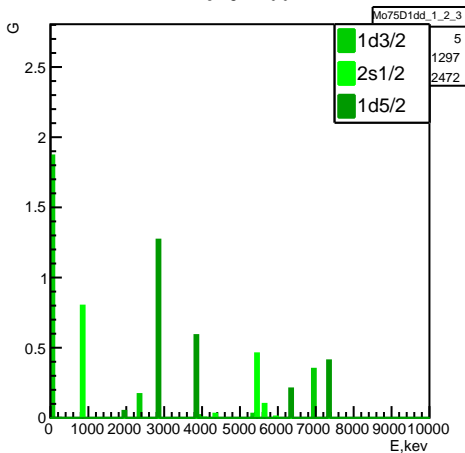
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9024.62 1d3/2 0.48875 1.2975

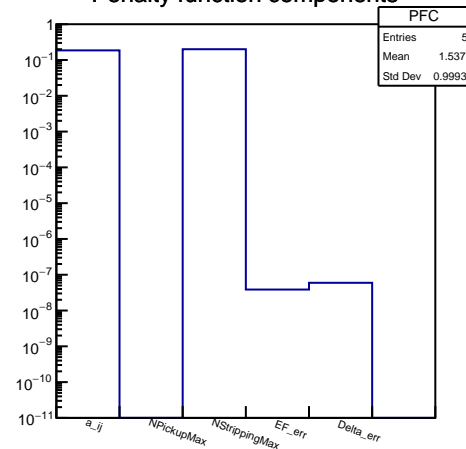
-11675.7 2s1/2 0.7425 1.025

-17090.6 1d5/2 1.01833 1.17667

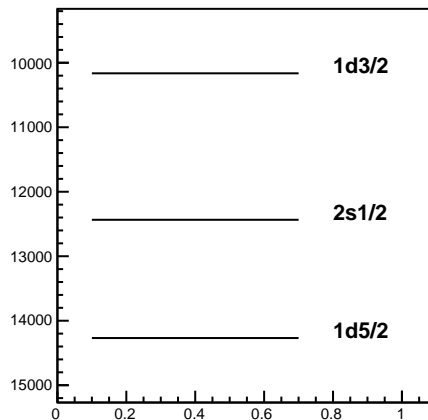
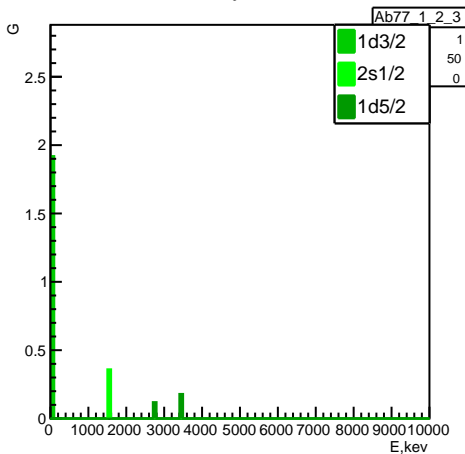
Mo75D1dd



Penalty function components



Ab77



Experiment: Mo75D1dd (16) Ab77 (4)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: -7871.63 \pm 4532.66 keV

Δ : 11771.7 \pm 12627.2 keV

penalty: 0.0771222

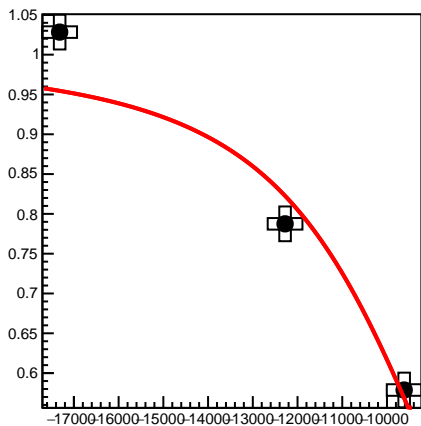
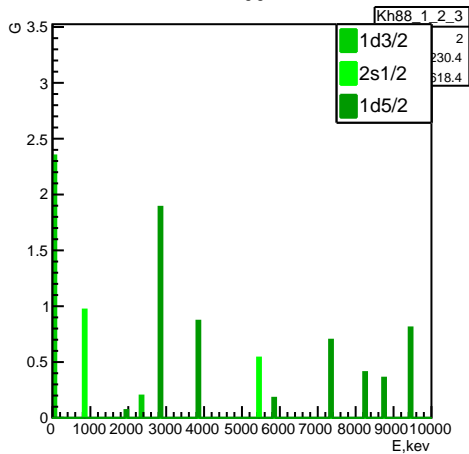
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-10163.8 1d3/2 0.565 1.09

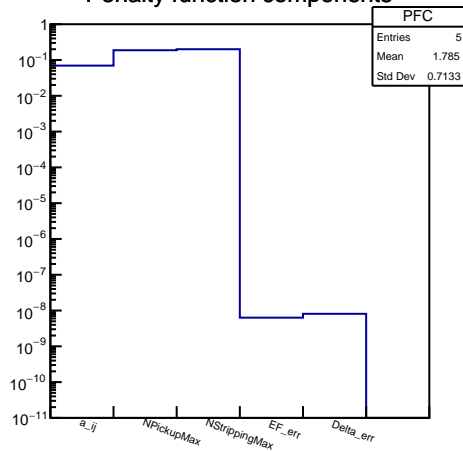
-12434.9 2s1/2 0.76075 0.8815

-14268.7 1d5/2 0.685833 0.471667

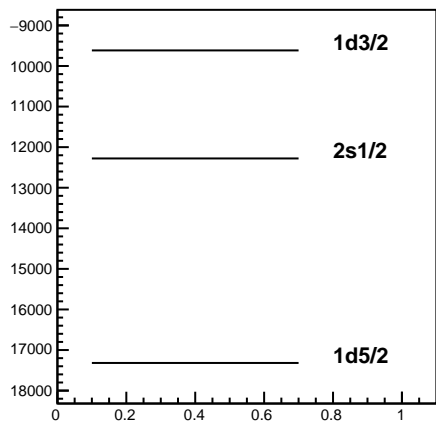
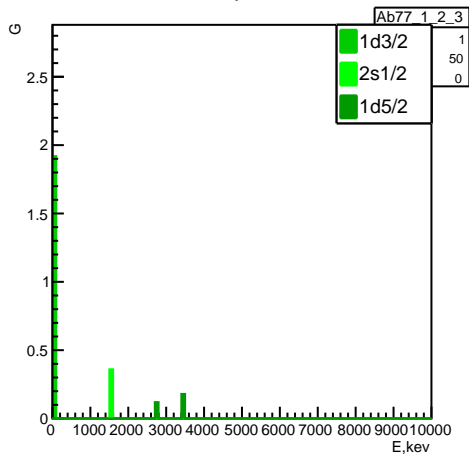
Kh88



Penalty function components



Ab77



Experiment: Kh88 (13) Ab77 (4)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

 E_F : -9094.84 \pm 743.635 keV Δ : 3769.12 \pm 1717.47 keV

penalty: 0.0914444

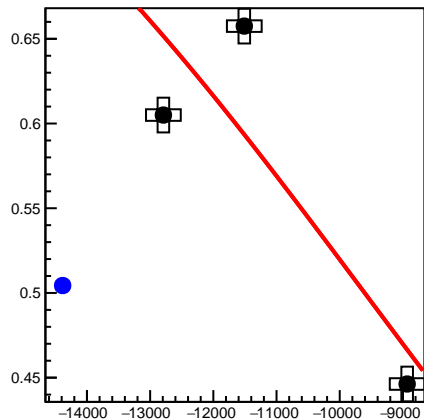
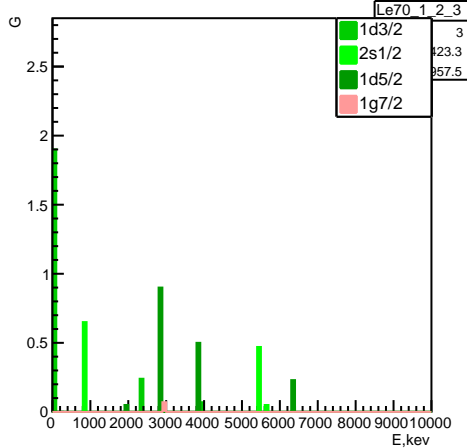
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9616.07 1d3/2 0.57875 1.1175

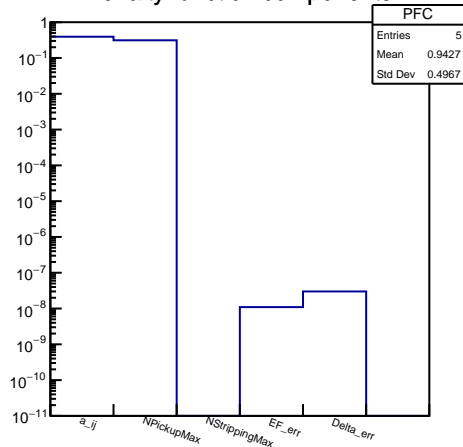
-12278.5 2s1/2 0.7875 0.935

-17318.4 1d5/2 1.02833 1.15667

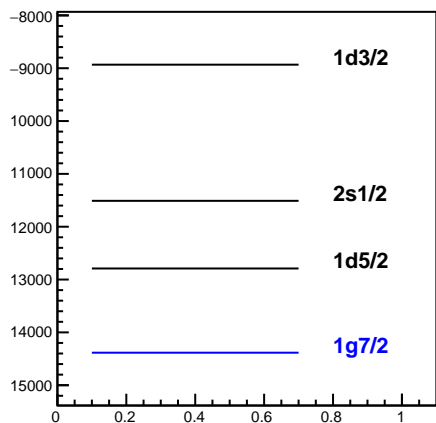
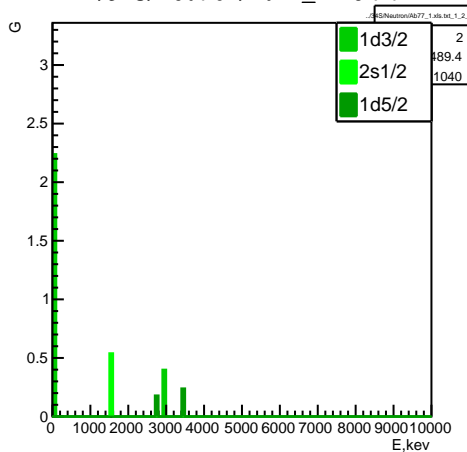
Le70



Penalty function components



../34S/Neutron/Ab77_1.xls.txt



Experiment: Le70 (11) ../34S/Neutron/Ab77_
neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: -9605.18 \pm 1287.67 keV

Δ : 10007.8 \pm 6365.07 keV

penalty: 0.141188

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

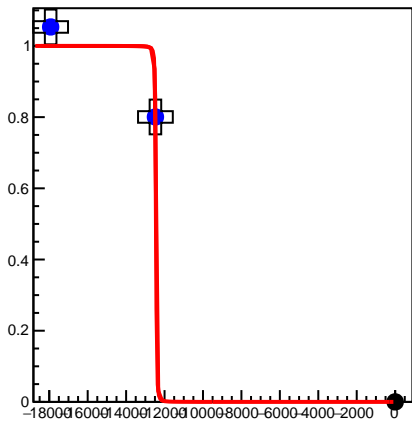
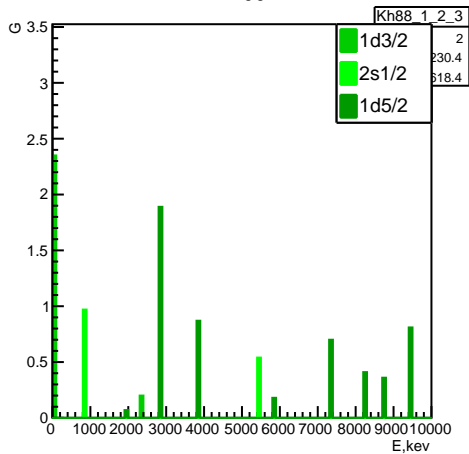
-8932.88 1d3/2 0.44625 1.2125

-11510.1 2s1/2 0.6575 0.855

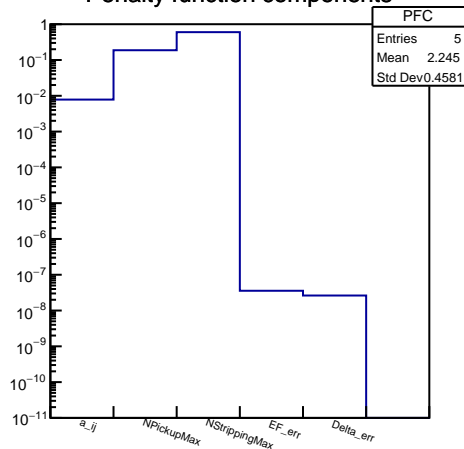
-12790.5 1d5/2 0.605 0.35

-14384.6 1g7/2 0.504375 0.00875

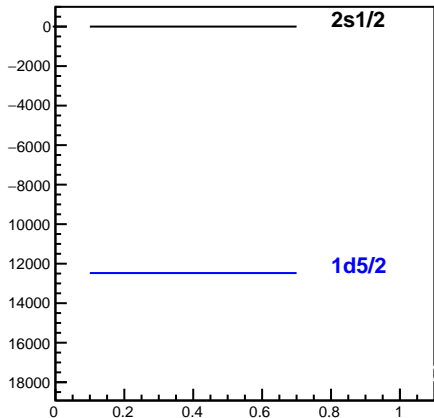
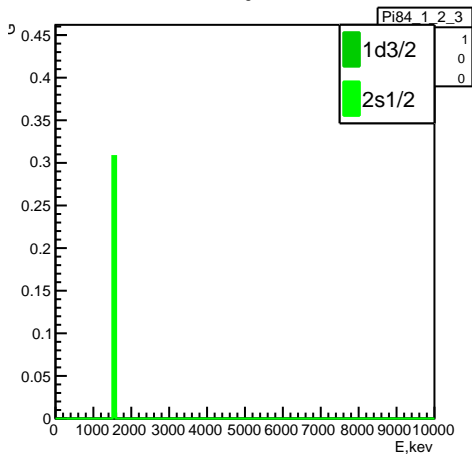
Kh88



Penalty function components



Pi84



Experiment: Kh88 (13) Pi84 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -12443.3 \pm 4190 keV

Δ : -42.0231 \pm 5572.59 keV

penalty: 0.159067

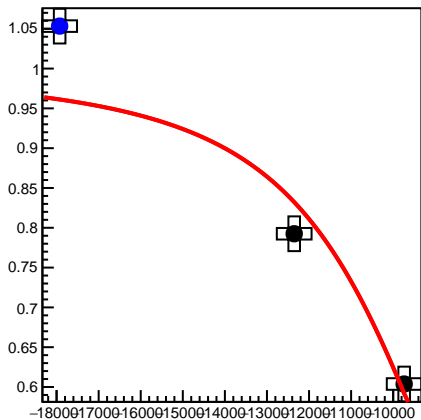
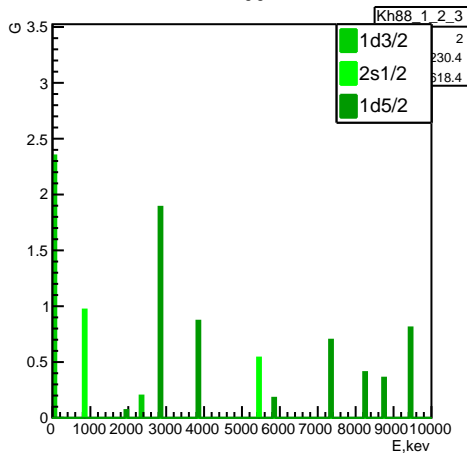
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

0 2s1/2 0 0.909

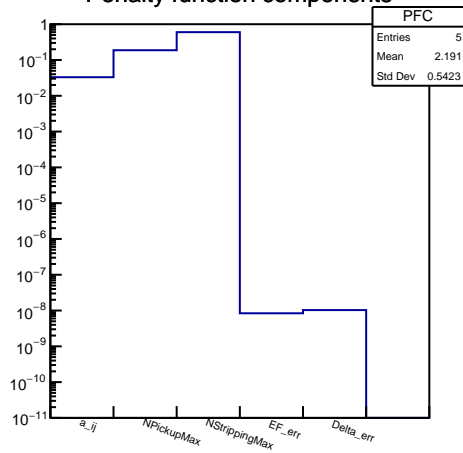
-12474.9 1d5/2 0.8005 1.10667

-17927.1 Error!n=33 l=0 j=0/2 1.05333 0

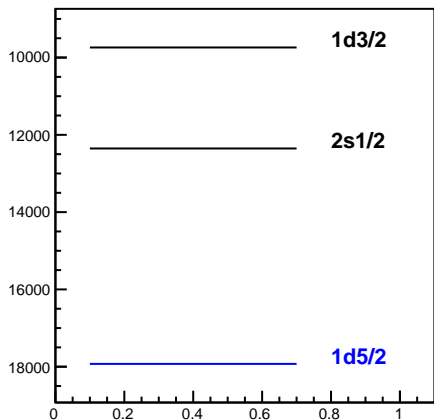
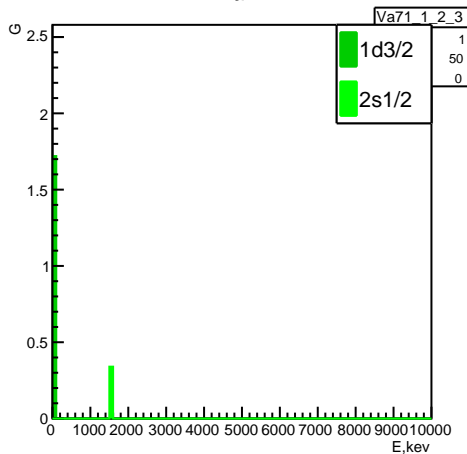
Kh88



Penalty function components



Va71



Experiment: Kh88 (13) Va71 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -9043.24 \pm 984.376 keV

Δ : -3721.23 \pm 2183.19 keV

penalty: 0.164111

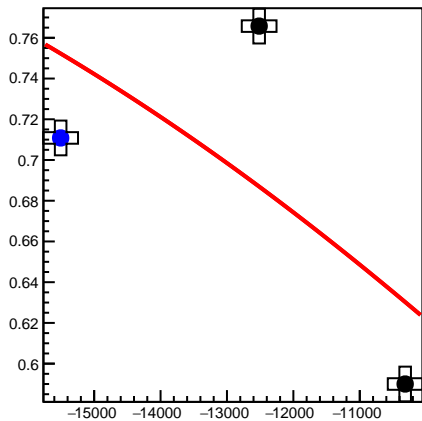
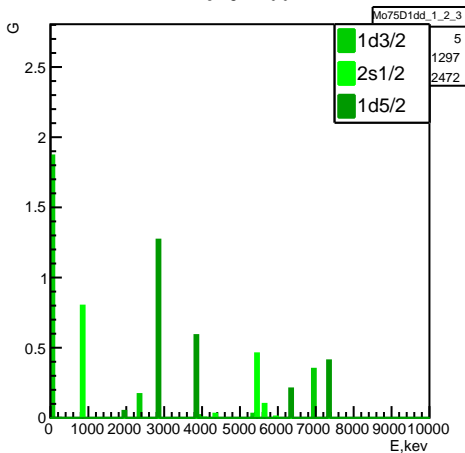
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9739.29 1d3/2 0.60375 1.0675

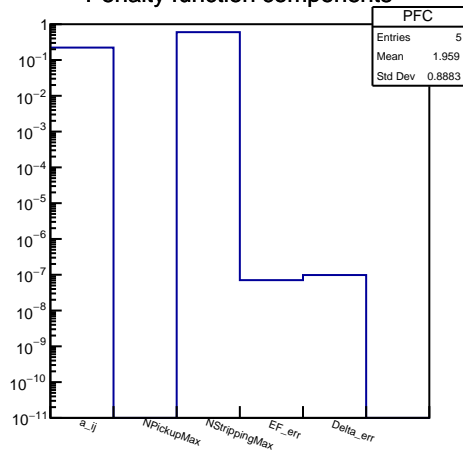
-12352.7 2s1/2 0.7925 0.925

-17927.1 1d5/2 1.05333 1.10667

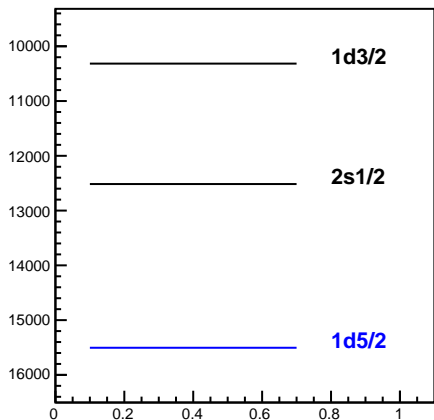
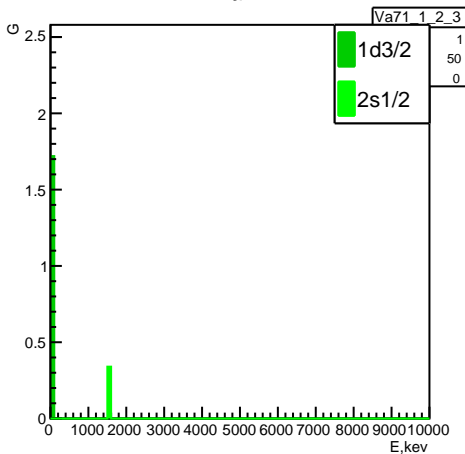
Mo75D1dd



Penalty function components



Va71



Experiment: Mo75D1dd (16) Va71 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

 $E_F: -5866.22 \pm 8307.44$ keV $\Delta: 16493.3 \pm 20814.4$ keV

penalty: 0.164456

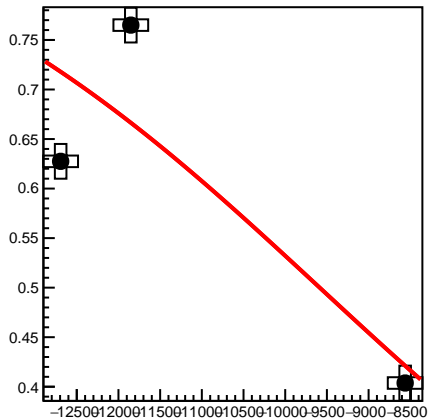
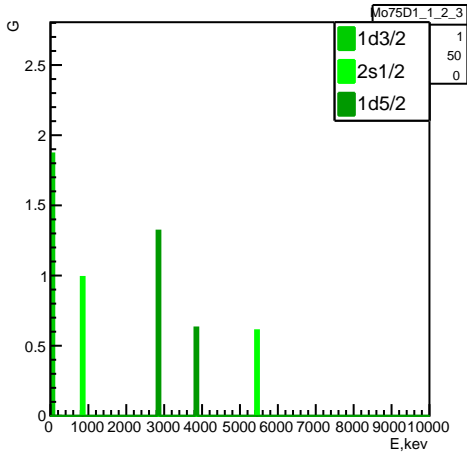
SPE, keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-10316.6 1d3/2 0.59 1.04

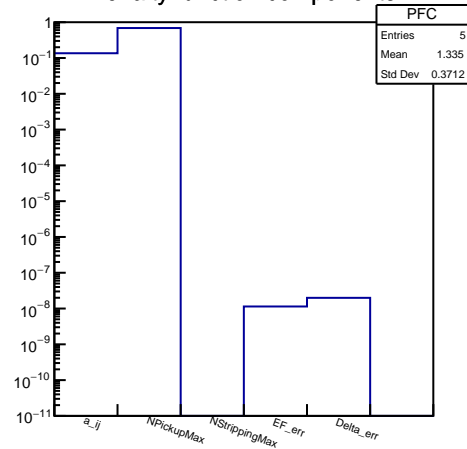
-12515.5 2s1/2 0.76575 0.8715

-15504.6 1d5/2 0.710833 0.421667

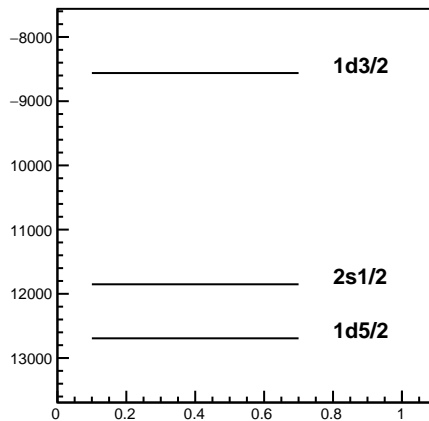
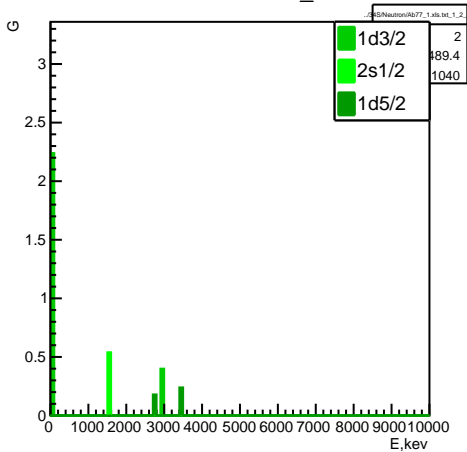
Mo75D1



Penalty function components



../34S/Neutron/Ab77_1.xls.txt



Experiment: Mo75D1 (5) ../34S/Neutron/Ab77
neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -9586.39 \pm 1340.35 keV

Δ : -6416.33 \pm 4220.64 keV

penalty: 0.164667

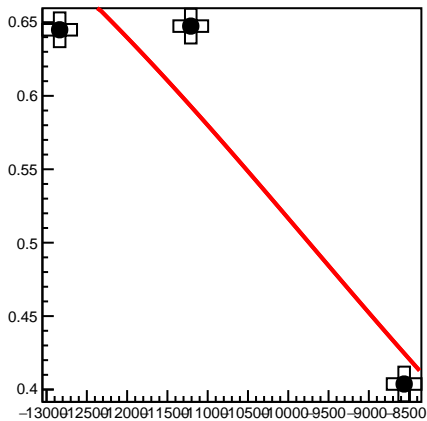
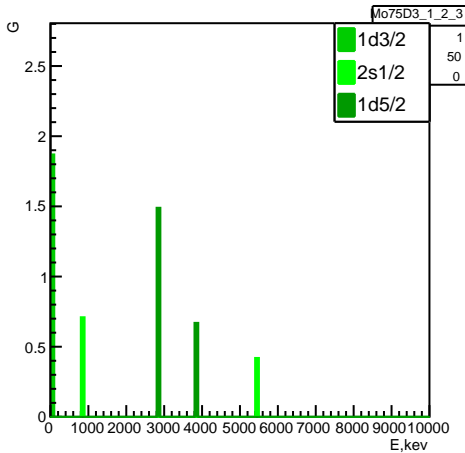
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-8561.55 1d3/2 0.40375 1.1275

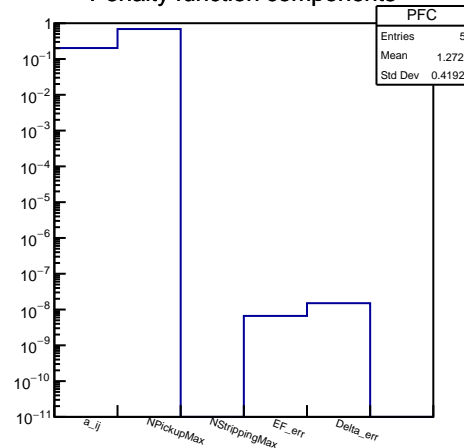
-11851.8 2s1/2 0.765 1.07

-12693.3 1d5/2 0.6275 0.395

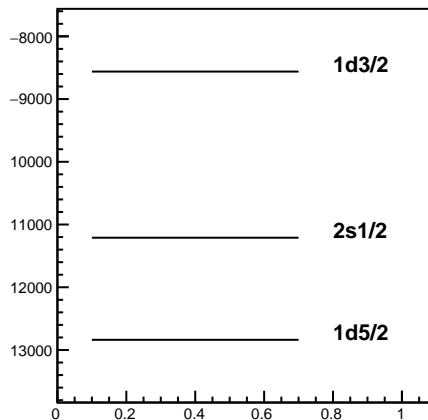
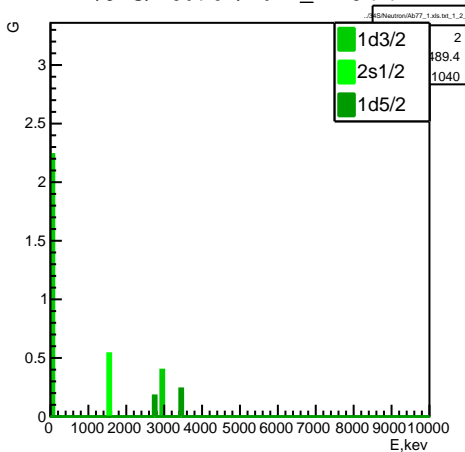
Mo75D3



Penalty function components



../34S/Neutron/Ab77_1.xls.txt



Experiment: Mo75D3 (5) ../34S/Neutron/Ab77

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -9742.8 ± 778.663 keV

Δ: 7757.04 ± 3191.05 keV

penalty: 0.178

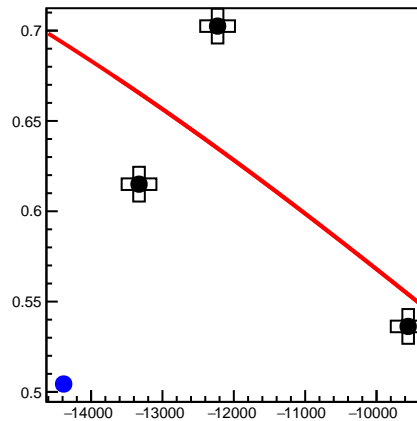
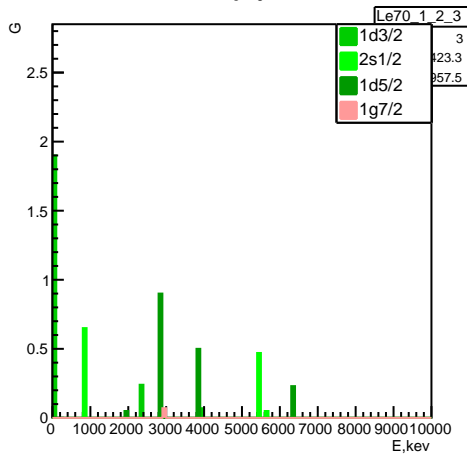
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-8561.55 1d3/2 0.40375 1.1275

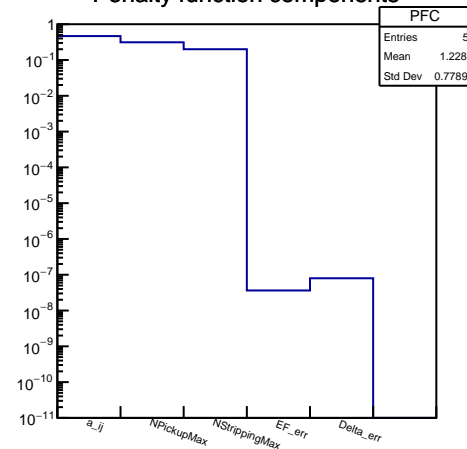
-11210.2 2s1/2 0.6475 0.835

-12837.6 1d5/2 0.645 0.43

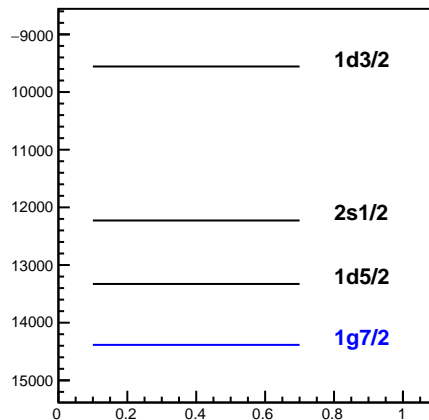
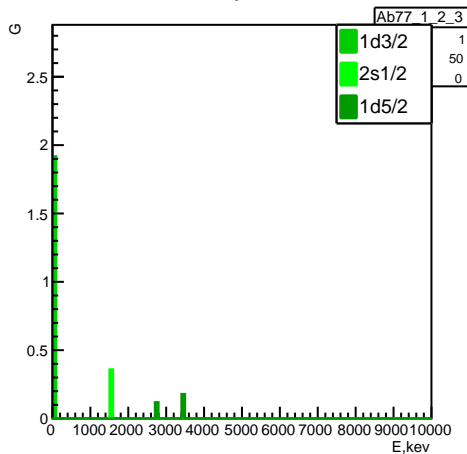
Le70



Penalty function components



Ab77



Experiment: Le70 (11) Ab77 (4)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

 $E_F: -7862.75 \pm 4270.75$ keV $\Delta: 15583.8 \pm 16908.6$ keV

penalty: 0.195688

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

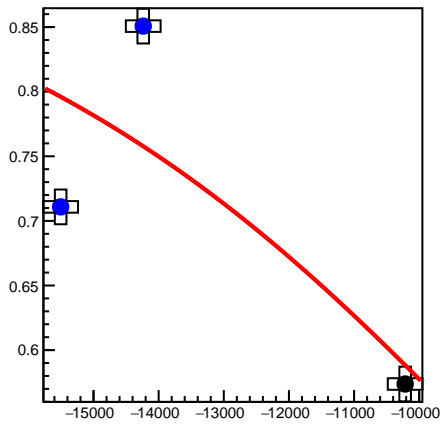
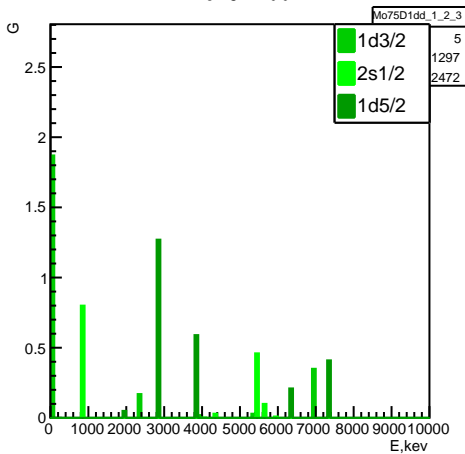
-9557.03 1d3/2 0.53625 1.0325

-12227.4 2s1/2 0.7025 0.765

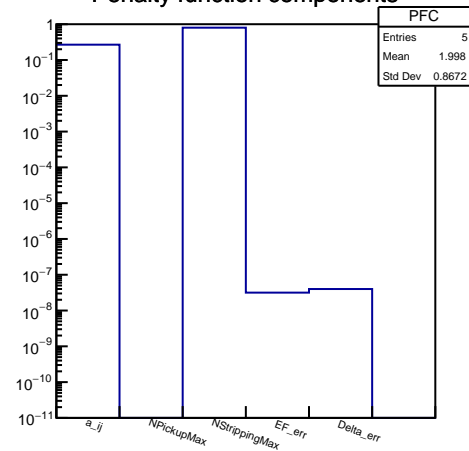
-13328.3 1d5/2 0.615 0.33

-14384.6 1g7/2 0.504375 0.00875

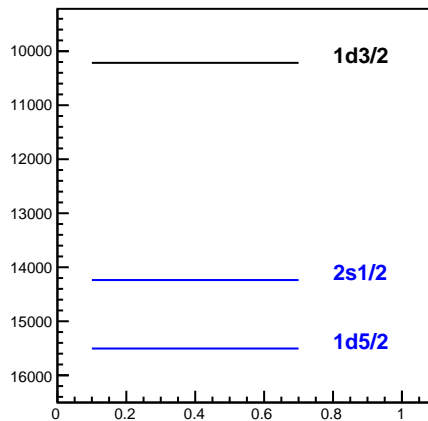
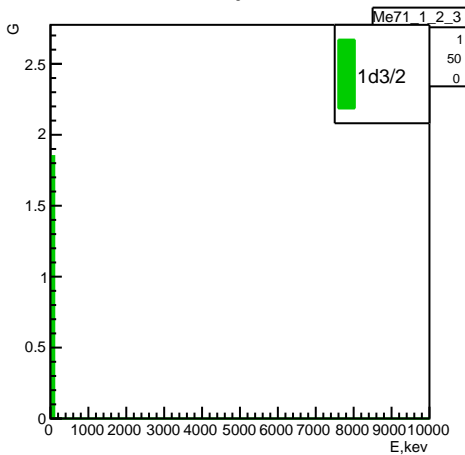
Mo75D1dd



Penalty function components



Me71



Experiment: Mo75D1dd (16) Me71 (1)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: -8506.71 \pm 3717.8 keV Δ : 9524.89 \pm 8461.7 keV

penalty: 0.213622

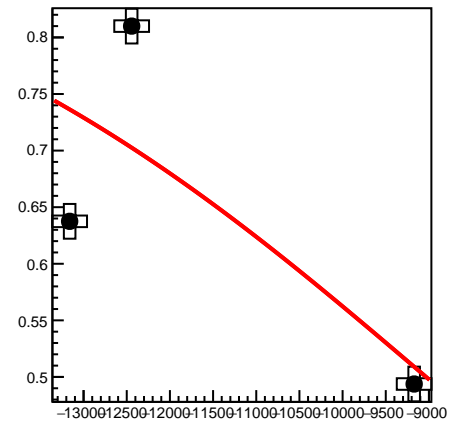
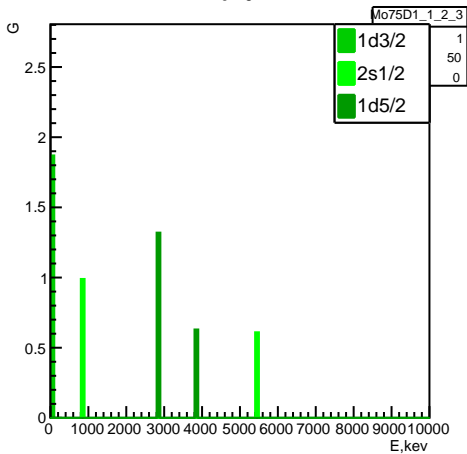
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-10215.7 1d3/2 0.57375 1.0725

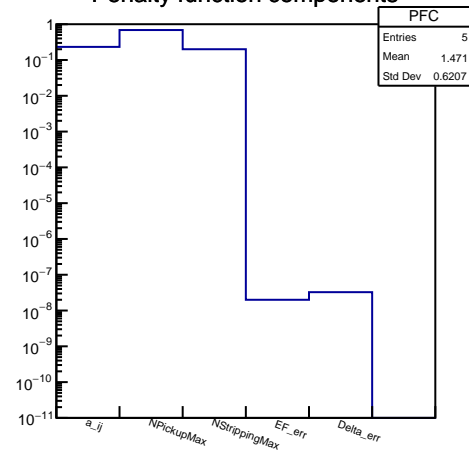
-14236.7 2s1/2 0.85075 0.7015

-15504.6 1d5/2 0.710833 0.421667

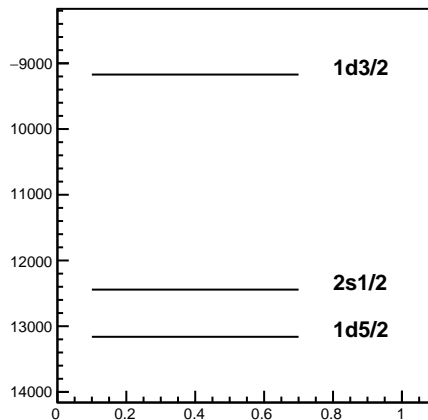
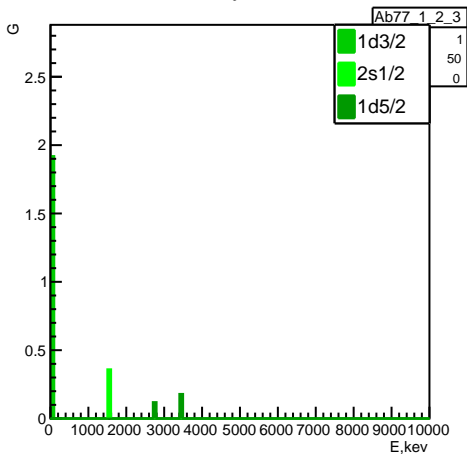
Mo75D1



Penalty function components



Ab77



Experiment: Mo75D1 (5) Ab77 (4)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F : -9032.89 ± 2346.5 keV

Δ : 7694.84 ± 6912.09 keV

penalty: 0.224

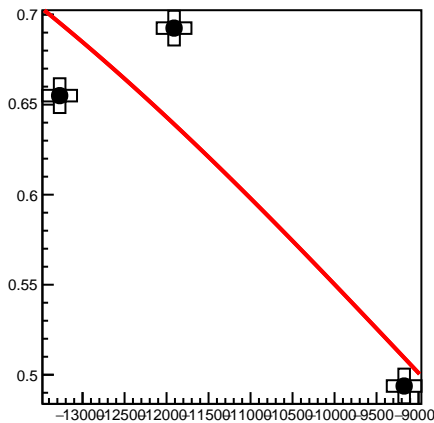
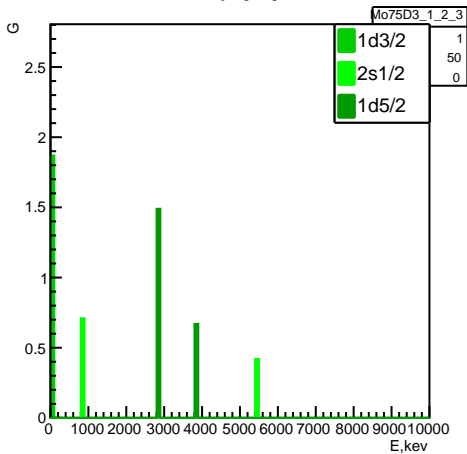
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9171.14 1d3/2 0.49375 0.9475

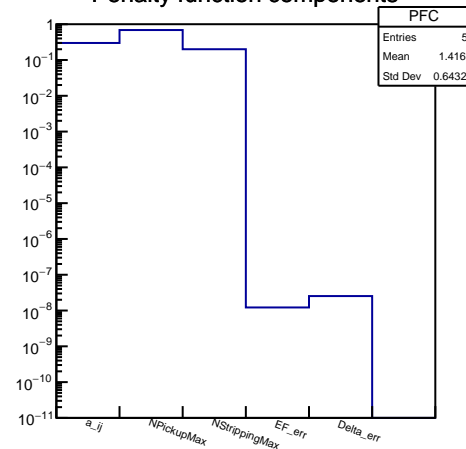
-12443.2 2s1/2 0.81 0.98

-13161.4 1d5/2 0.6375 0.375

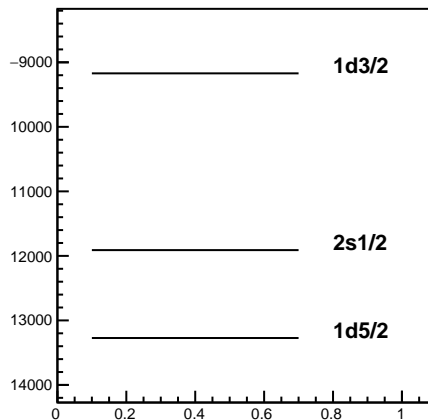
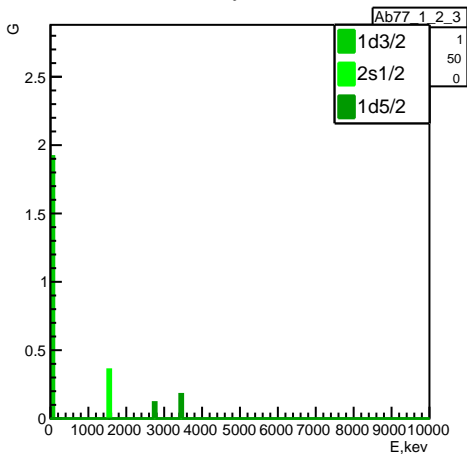
Mo75D3



Penalty function components



Ab77



Experiment: Mo75D3 (5) Ab77 (4)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: -8980.06 \pm 1432.14 keV

Δ : 10110.5 \pm 5378.94 keV

penalty: 0.237333

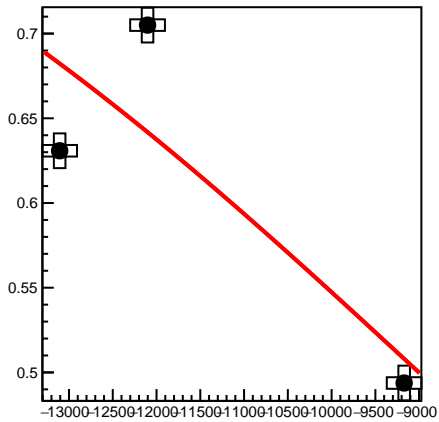
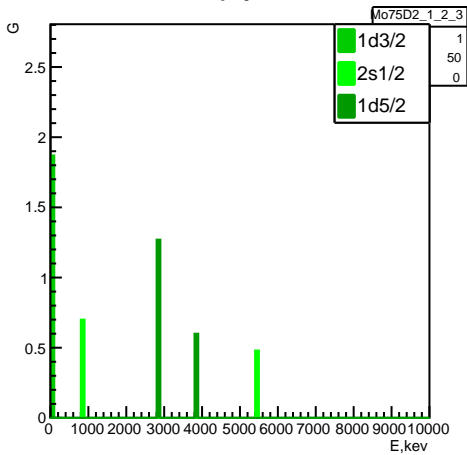
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9171.14 1d3/2 0.49375 0.9475

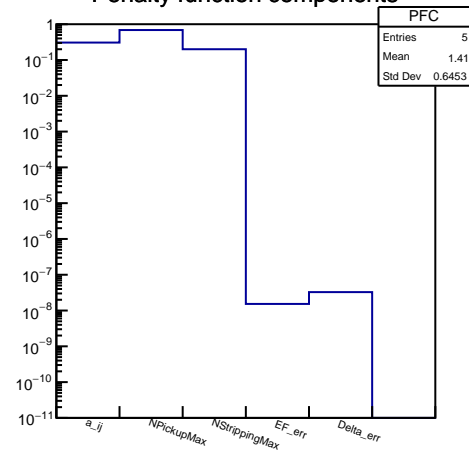
-11910.6 2s1/2 0.6925 0.745

-13272.8 1d5/2 0.655 0.41

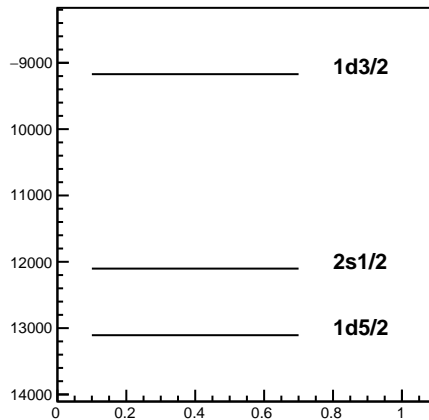
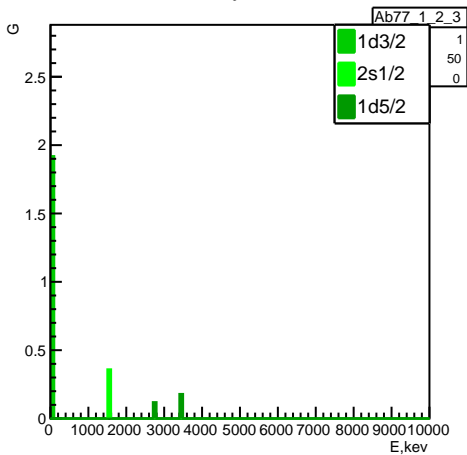
Mo75D2



Penalty function components



Ab77



Experiment: Mo75D2 (5) Ab77 (4)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -9002.85 \pm 1797.14 keV Δ : 10480.3 \pm 6937.93 keV

penalty: 0.238889

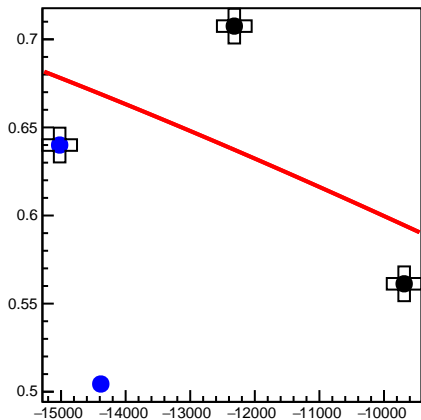
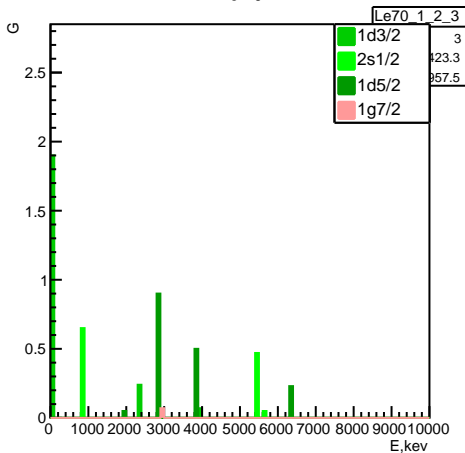
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9171.14 1d3/2 0.49375 0.9475

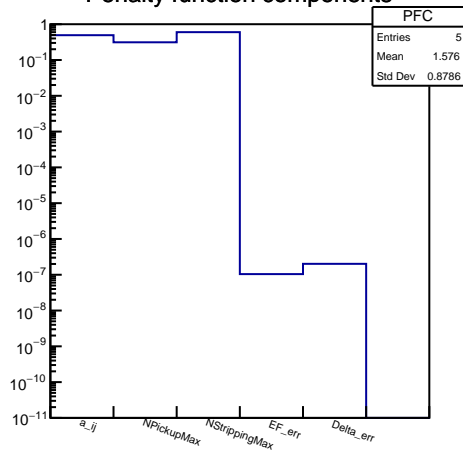
-12102.5 2s1/2 0.705 0.77

-13106.7 1d5/2 0.630833 0.361667

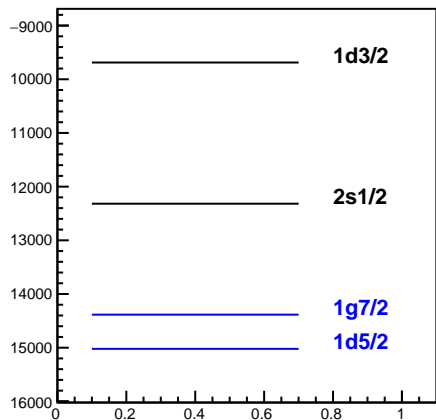
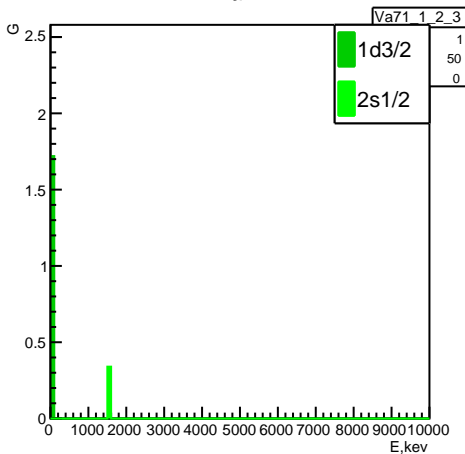
Le70



Penalty function components



Va71



Experiment: Le70 (11) Va71 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -4258.67 \pm 12241.3 keV Δ : 28213.3 \pm 42780.8 keV

penalty: 0.281188

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

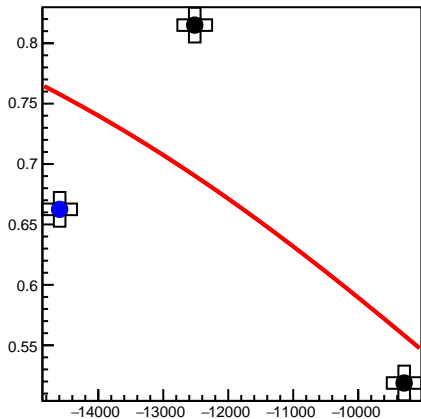
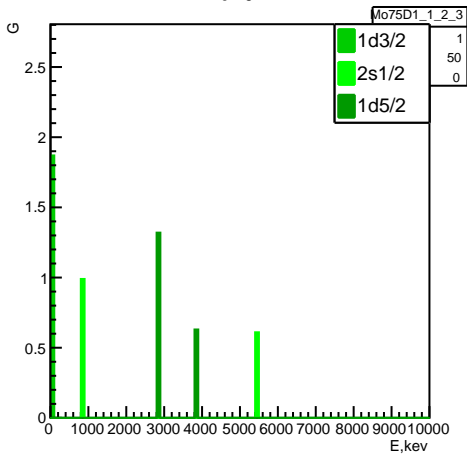
-9687.91 1d3/2 0.56125 0.9825

-12317.7 2s1/2 0.7075 0.755

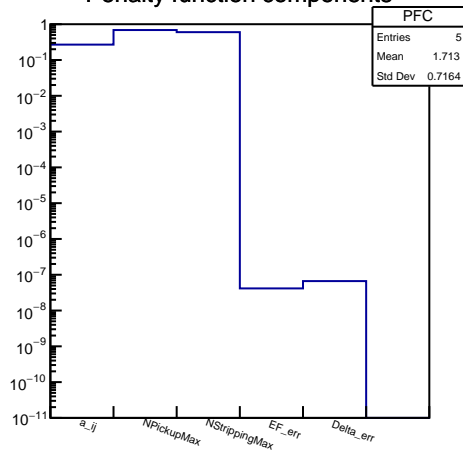
-15021.6 1d5/2 0.64 0.28

-14384.6 1g7/2 0.504375 0.00875

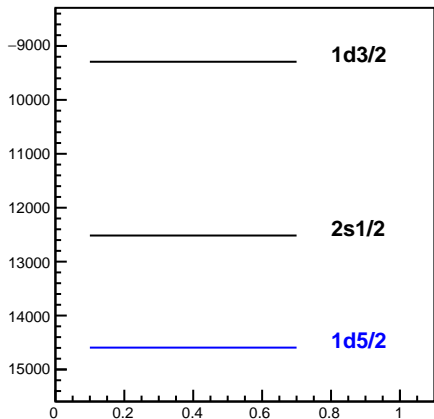
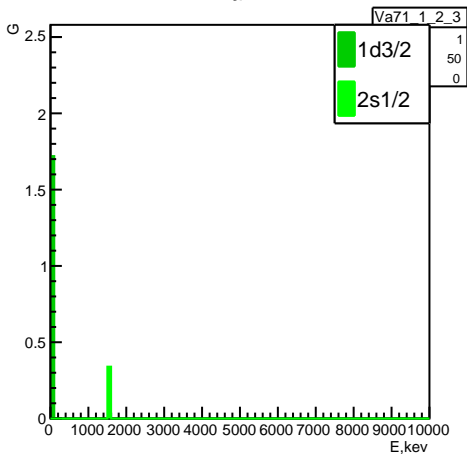
Mo75D1



Penalty function components



Va71



Experiment: Mo75D1 (5) Va71 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

 $E_F: -8010.12 \pm 4876.45$ keV $\Delta: 10945.2 \pm 14094.4$ keV

penalty: 0.311333

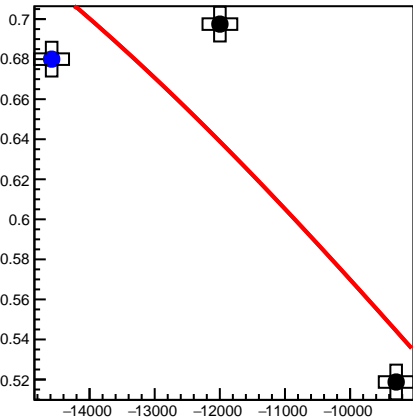
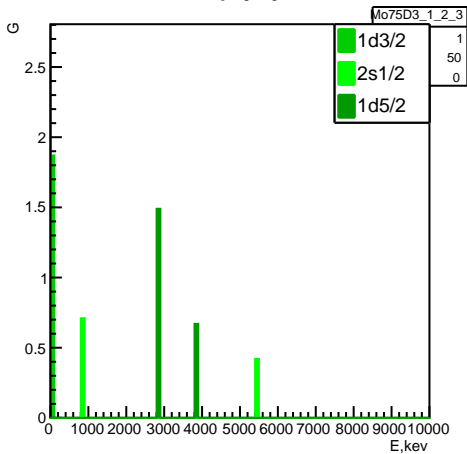
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9292.92 1d3/2 0.51875 0.8975

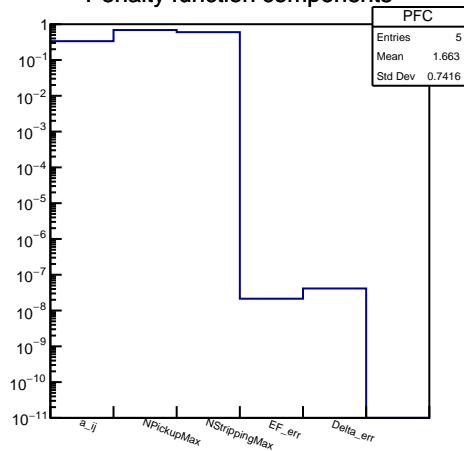
-12515.7 2s1/2 0.815 0.97

-14594.5 1d5/2 0.6625 0.325

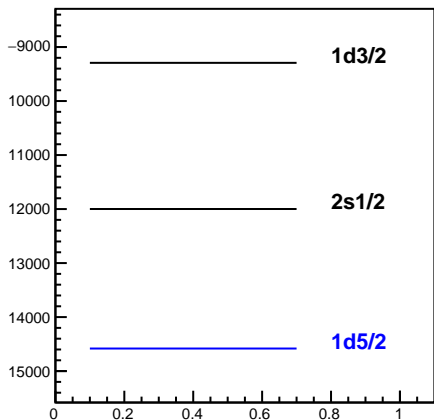
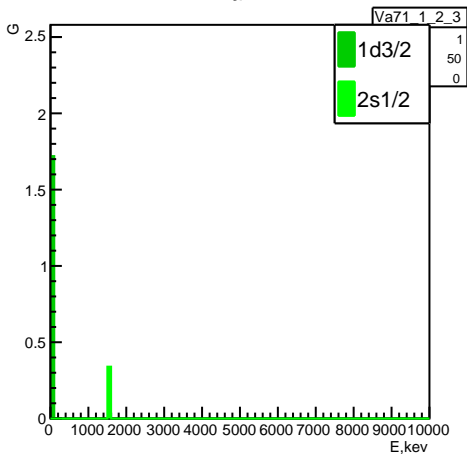
Mo75D3



Penalty function components



Va71



Experiment: Mo75D3 (5) Va71 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -8090.64 \pm 2514.03 keV Δ : 13519 \pm 8766.29 keV

penalty: 0.324667

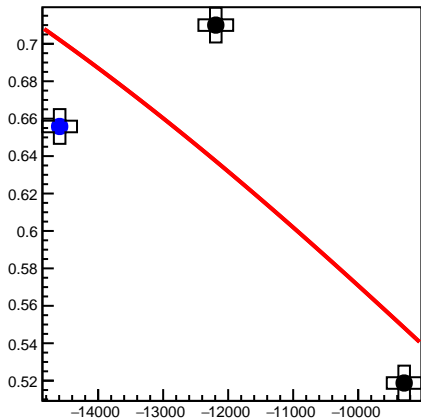
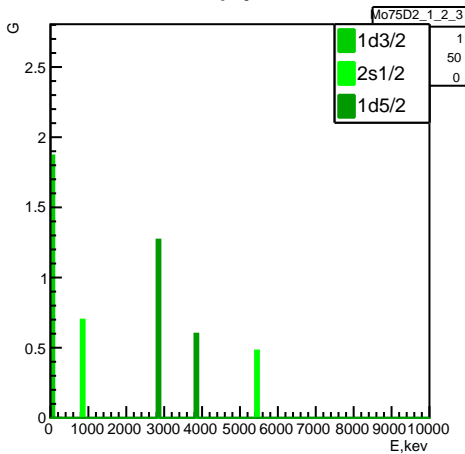
SPE, keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9292.92 1d3/2 0.51875 0.8975

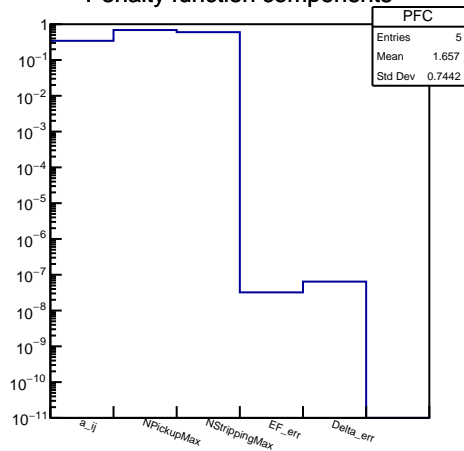
-11999 2s1/2 0.6975 0.735

-14582.1 1d5/2 0.68 0.36

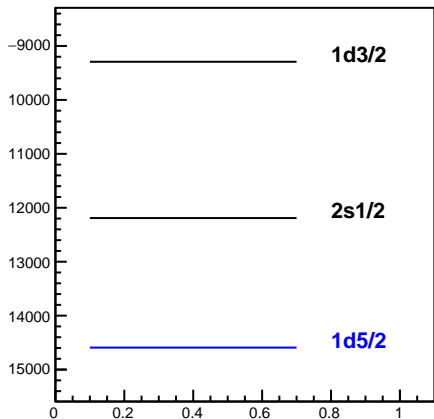
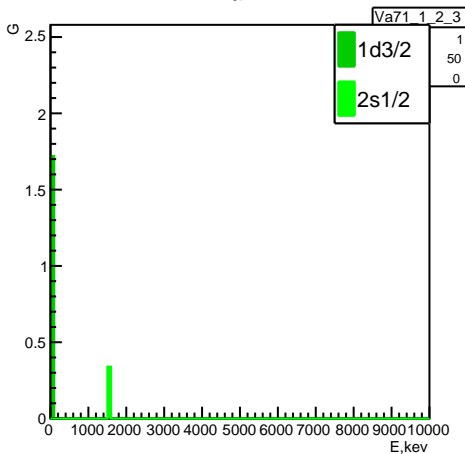
Mo75D2



Penalty function components



Va71



Experiment: Mo75D2 (5) Va71 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: -7801.24 \pm 3779.1 keV Δ : 15368.3 \pm 13635.9 keV

penalty: 0.326222

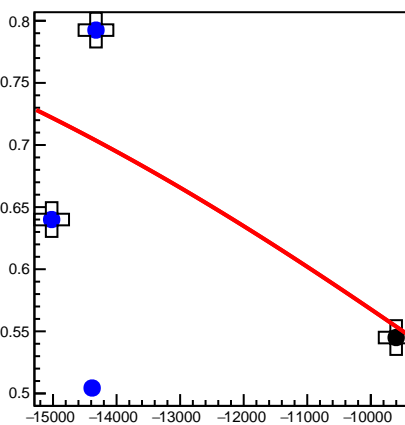
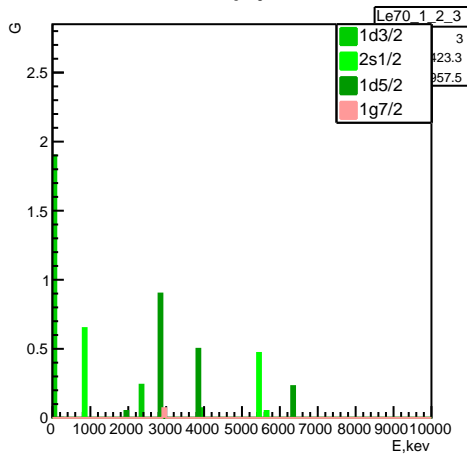
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9292.92 1d3/2 0.51875 0.8975

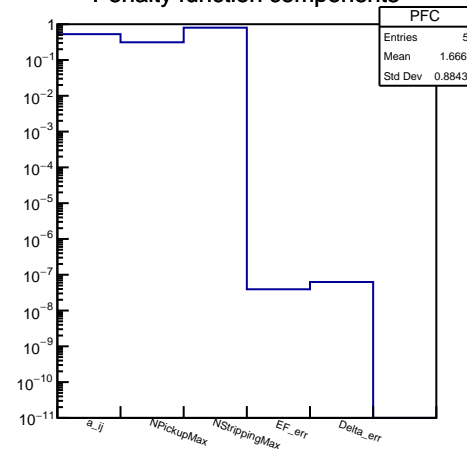
-12190.5 2s1/2 0.71 0.76

-14592.4 1d5/2 0.655833 0.311667

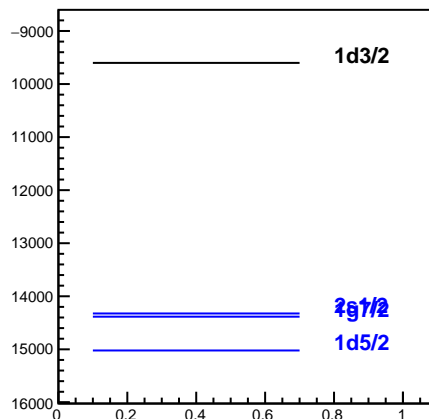
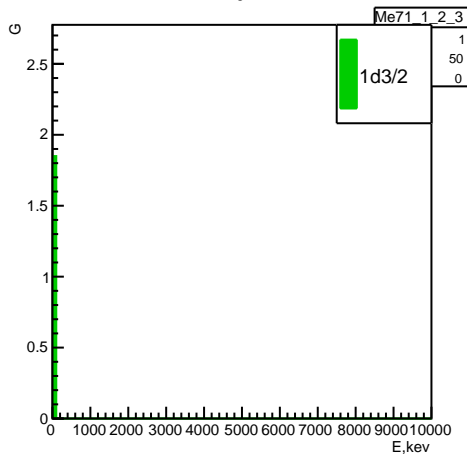
Le70



Penalty function components



Me71



Experiment: Le70 (11) Me71 (1)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -8085.49 \pm 4613.19 keV Δ : 13992.6 \pm 13289.3 keV

penalty: 0.328063

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

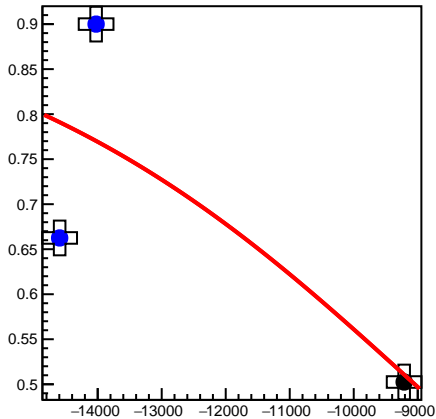
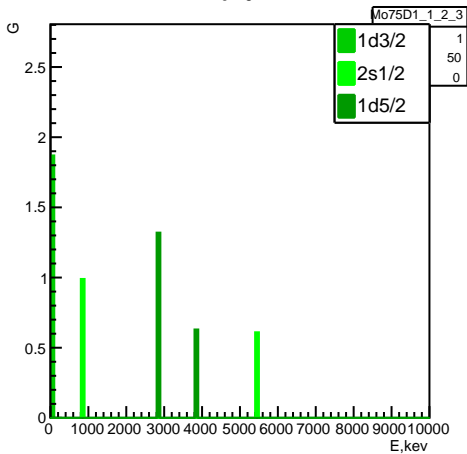
-9601.37 1d3/2 0.545 1.015

-14324.2 2s1/2 0.7925 0.585

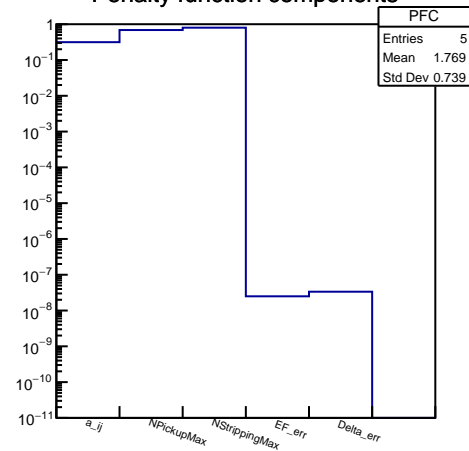
-15021.6 1d5/2 0.64 0.28

-14384.6 1g7/2 0.504375 0.00875

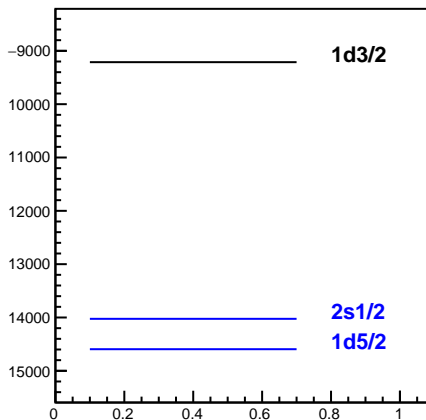
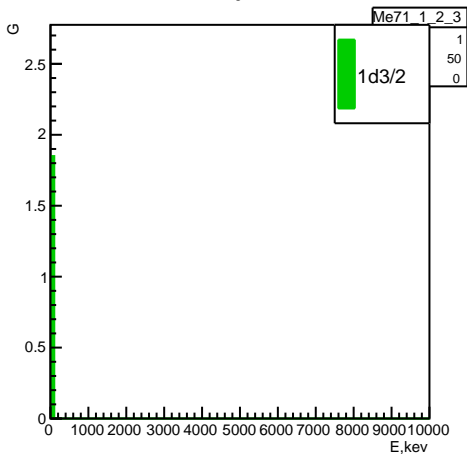
Mo75D1



Penalty function components



Me71



Experiment: Mo75D1 (5) Me71 (1)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

 $E_F: -9046.94 \pm 2934.28$ keV $\Delta: -7750.5 \pm 7119.38$ keV

penalty: 0.3605

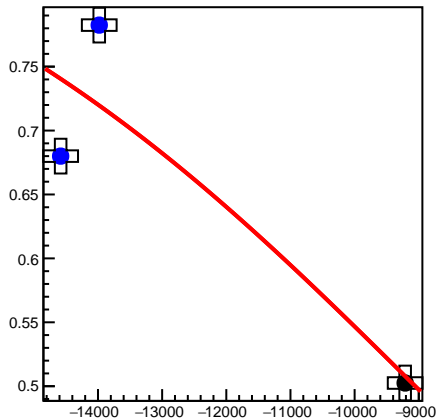
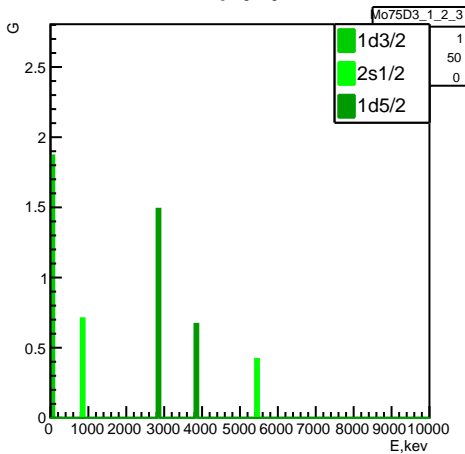
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9212.28 1d3/2 0.5025 0.93

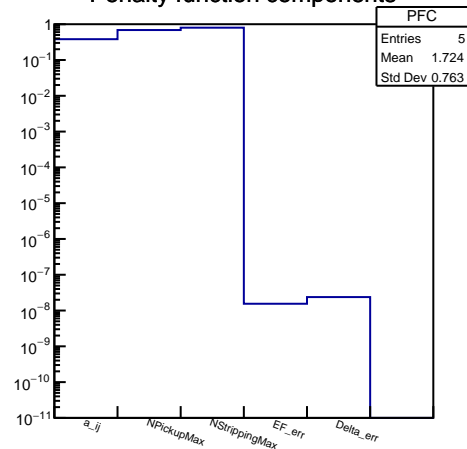
-14025 2s1/2 0.9 0.8

-14594.5 1d5/2 0.6625 0.325

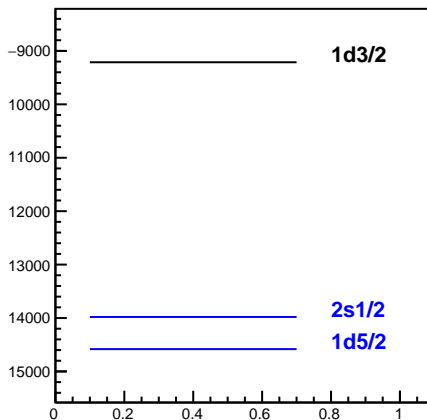
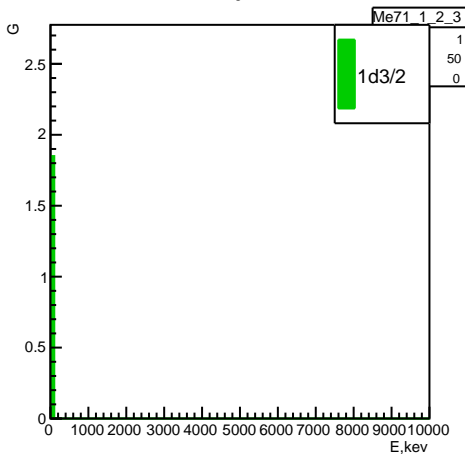
Mo75D3



Penalty function components



Me71



Experiment: Mo75D3 (5) Me71 (1)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: -9054.7 \pm 1817.61 keV Δ : 10075.6 \pm 5040.17 keV

penalty: 0.373833

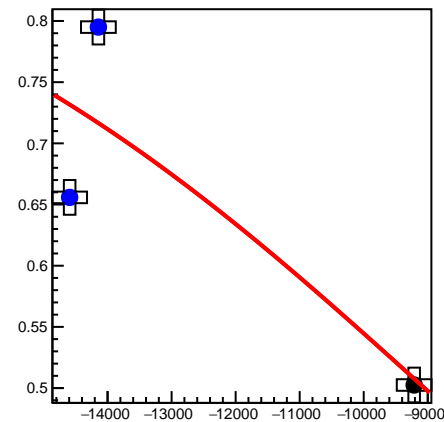
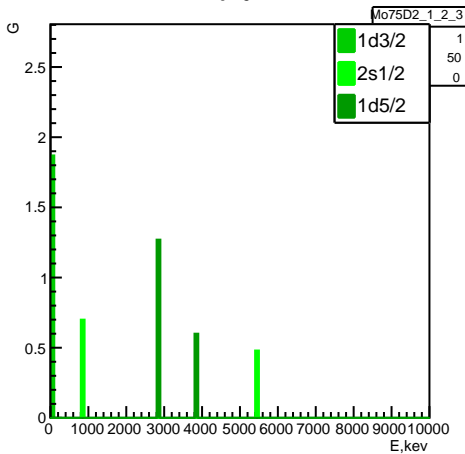
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9212.28 1d3/2 0.5025 0.93

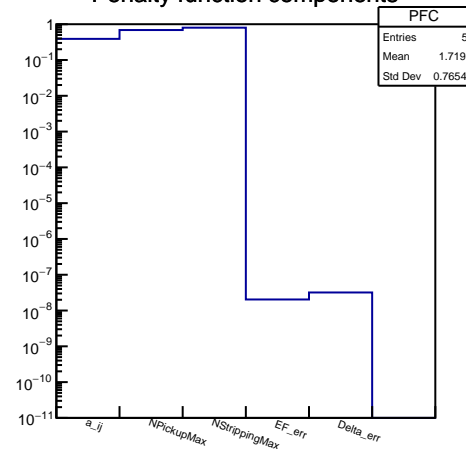
-13980.6 2s1/2 0.7825 0.565

-14582.1 1d5/2 0.68 0.36

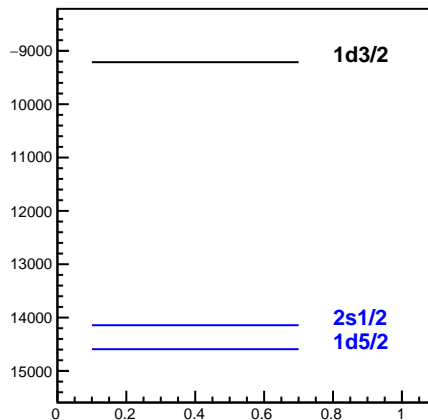
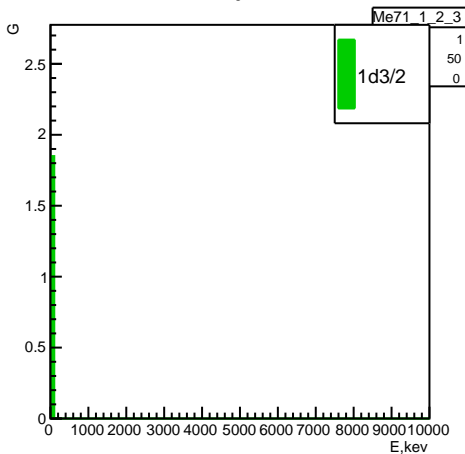
Mo75D2



Penalty function components



Me71



Experiment: Mo75D2 (5) Me71 (1)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: -9049.95 \pm 2393.36 keV Δ : 10598.6 \pm 6777.76 keV

penalty: 0.375389

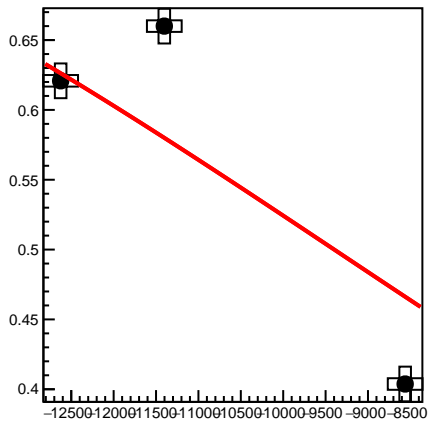
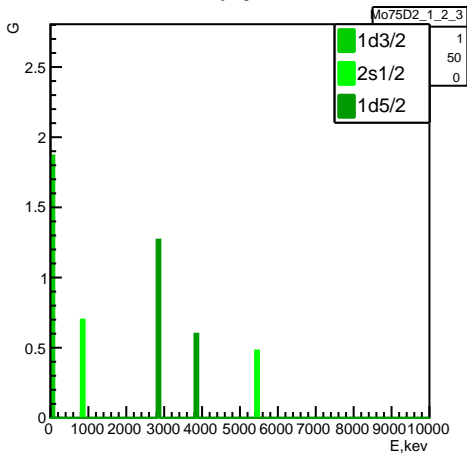
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9212.28 1d3/2 0.5025 0.93

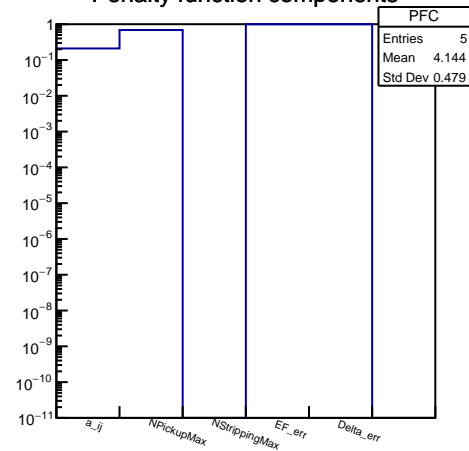
-14143.4 2s1/2 0.795 0.59

-14592.4 1d5/2 0.655833 0.311667

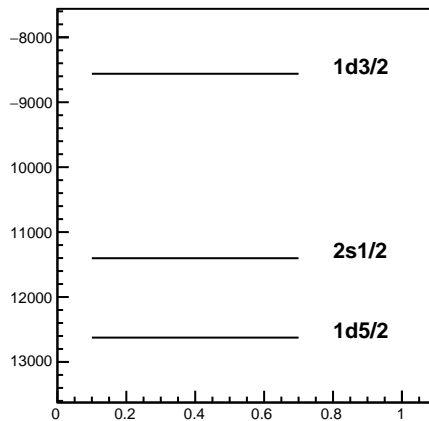
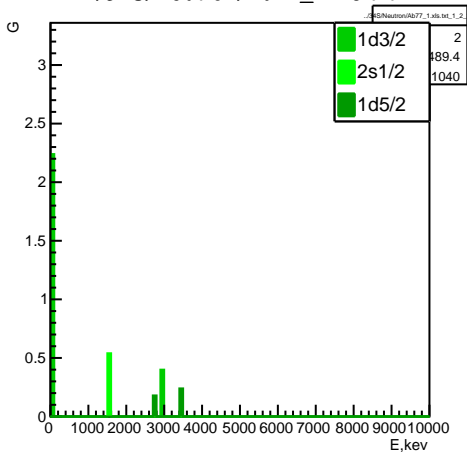
Mo75D2



Penalty function components



../34S/Neutron/Ab77_1.xls.txt



Experiment: Mo75D2 (5) ../34S/Neutron/Ab77
neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F : $-9398.23 \pm 5.07883e+06$ keV

Δ : 12364.5 ± 17.451 keV

penalty: $6.59041e+10$

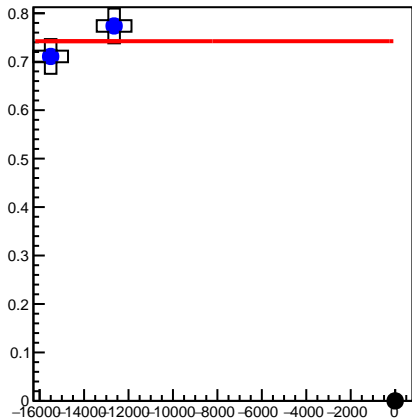
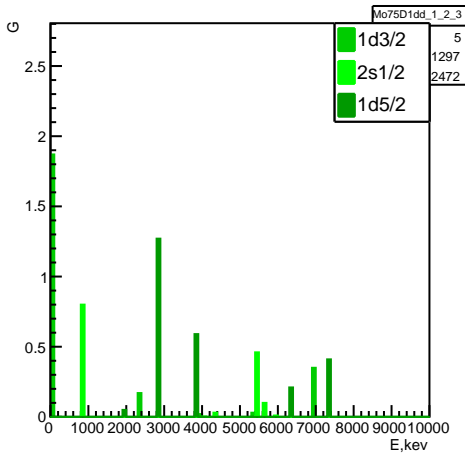
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-8561.55 1d3/2 0.40375 1.1275

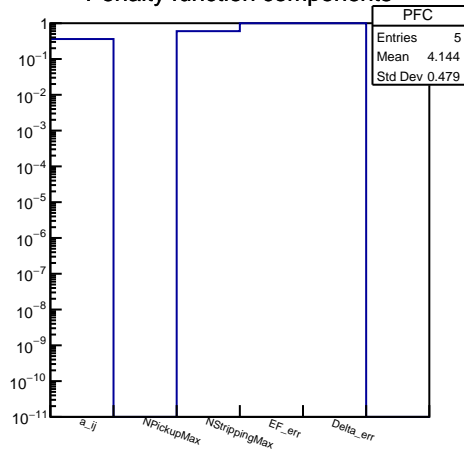
-11402.4 2s1/2 0.66 0.86

-12625.1 1d5/2 0.620833 0.381667

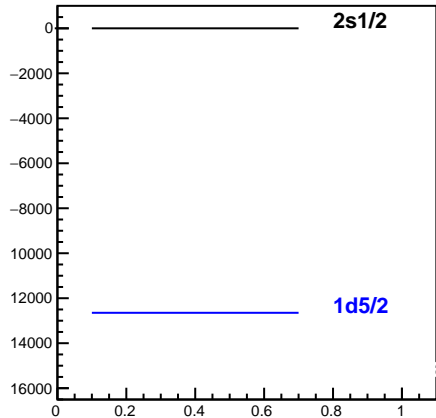
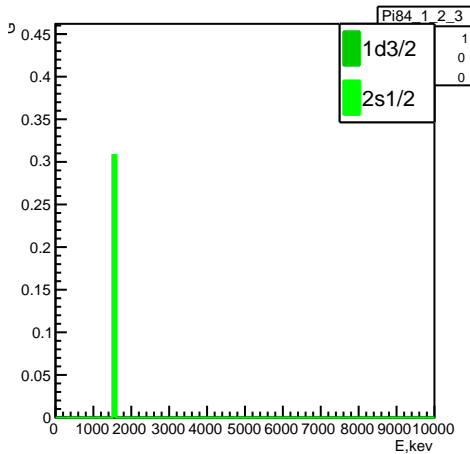
Mo75D1dd



Penalty function components



Pi84



Experiment: Mo75D1dd (16) Pi84 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: 1.14697e+09 \pm 1.17472e+11 keV Δ : -2.07046e+09 \pm 2.12049e+11 keV

penalty: 6.59041e+10

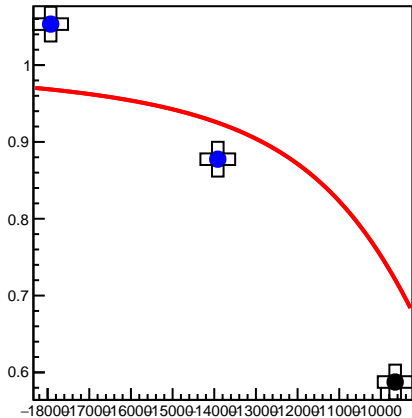
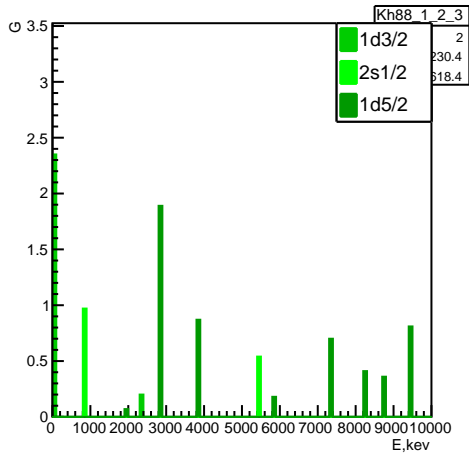
SPE,kev nlj OCC $\frac{G^+ + G^-}{2J+1}$

0 2s1/2 0 0.8555

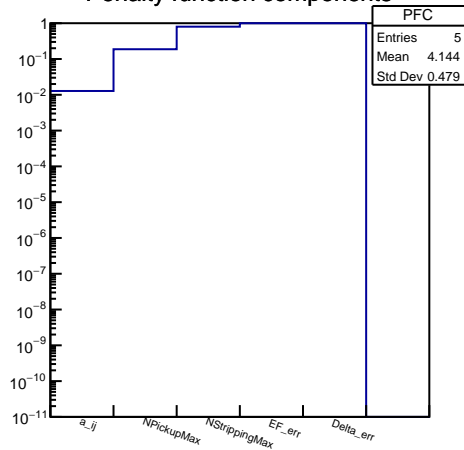
-12648.3 1d5/2 0.77375 0.421667

-15504.6 Error!n=465 l=0 j=0/2 0.710833 0

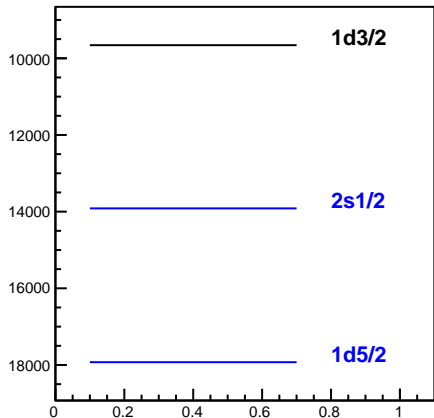
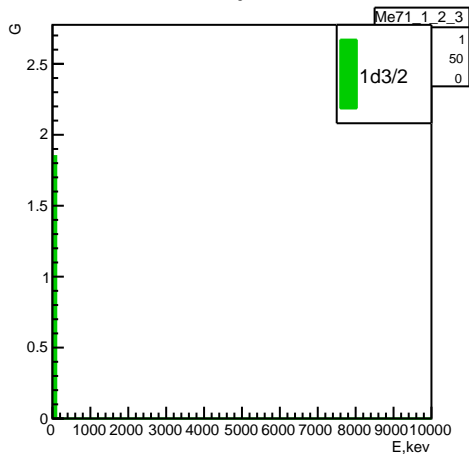
Kh88



Penalty function components



Me71



Experiment: Kh88 (13) Me71 (1)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: -7789.4 ± 34.002 keV

Δ: -3795.62 ± 406913 keV

penalty: 6.59041e+10

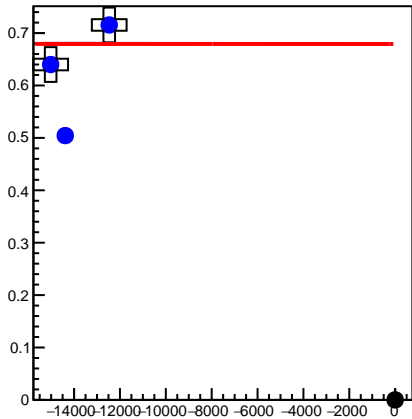
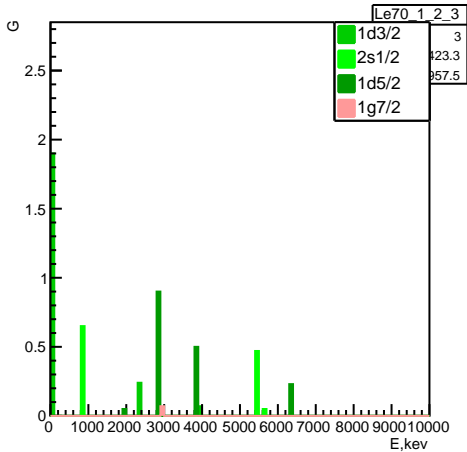
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

-9657.92 1d3/2 0.5875 1.1

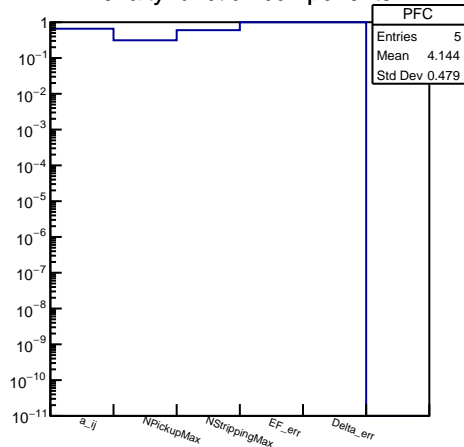
-13915.4 2s1/2 0.8775 0.755

-17927.1 1d5/2 1.05333 1.10667

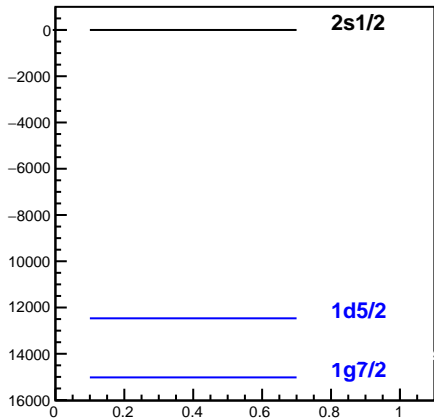
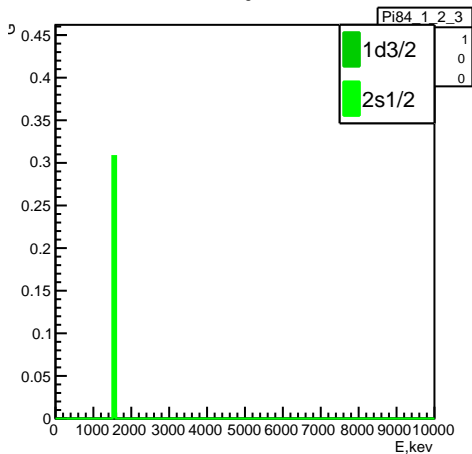
Le70



Penalty function components



Pi84



Experiment: Le70 (11) Pi84 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: 1.54891e+07 ± 1.11229e+09 keV

Δ: 4.03468e+07 ± 2.86508e+09 keV

penalty: 6.59041e+10

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

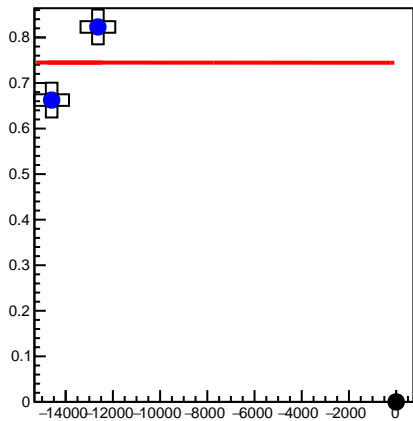
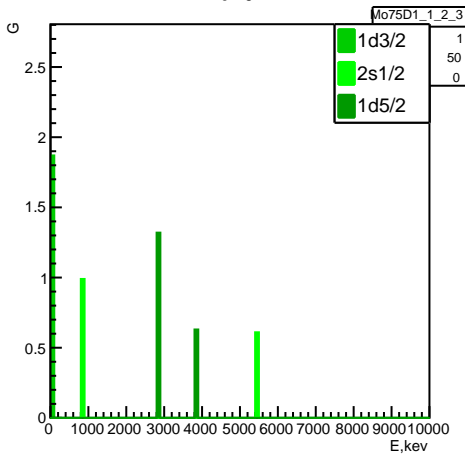
0 2s1/2 0 0.739

-12467.2 1d5/2 0.7155 0.28

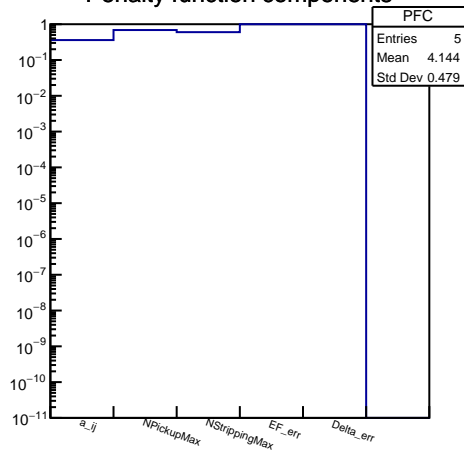
-15021.6 1g7/2 0.64 0.00875

-14384.6 Error!n=1408749274 l=1072145891

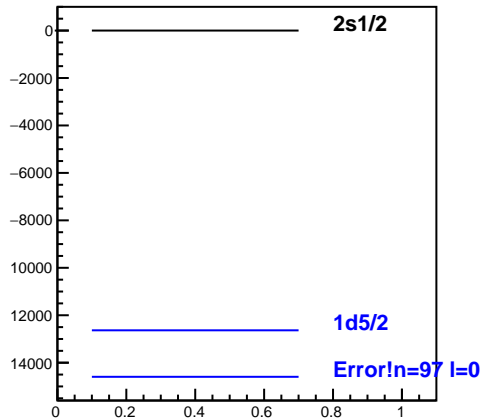
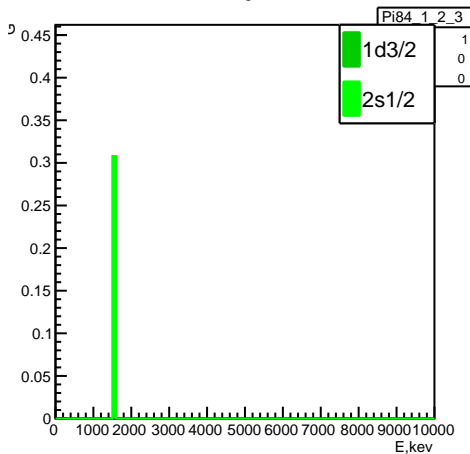
Mo75D1



Penalty function components



Pi84



Experiment: Mo75D1 (5) Pi84 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.27

E_F: 6.95791e+06 \pm 4.20536e+08 keV Δ : 1.24132e+07 \pm 7.40464e+08 keV

penalty: 6.59041e+10

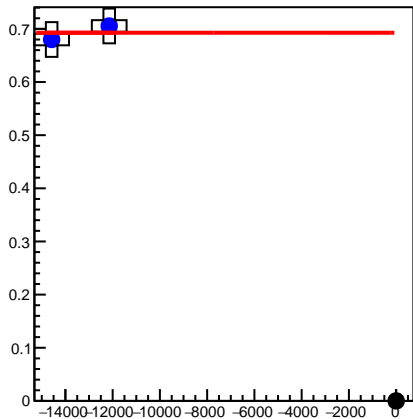
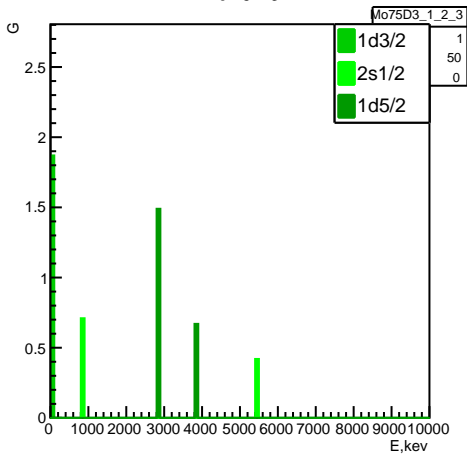
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

0 2s1/2 0 0.954

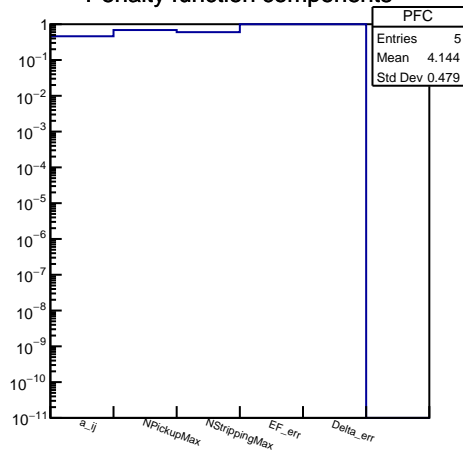
-12634.8 1d5/2 0.823 0.325

-14594.5 Error!n=97 l=0 j=0/2 0.6625 1.58101

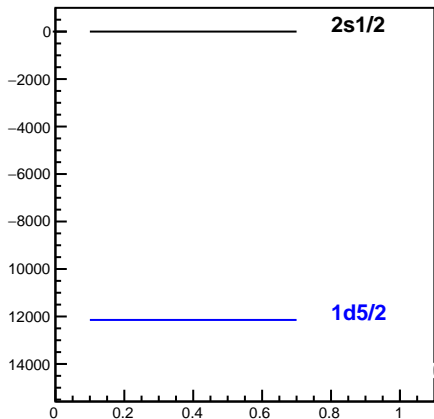
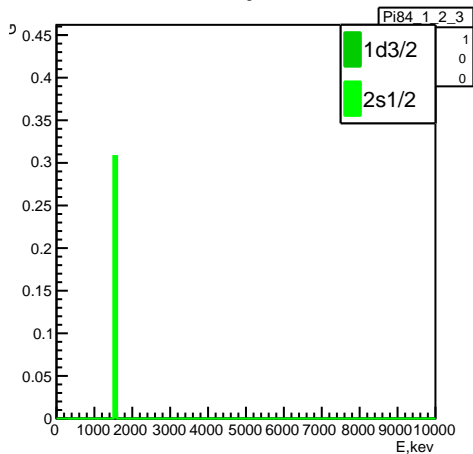
Mo75D3



Penalty function components



Pi84



Experiment: Mo75D3 (5) Pi84 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: 1.49417e+08 \pm 1.01886e+10 keV Δ : -3.57665e+08 \pm 2.43808e+10 keV

penalty: 6.59041e+10

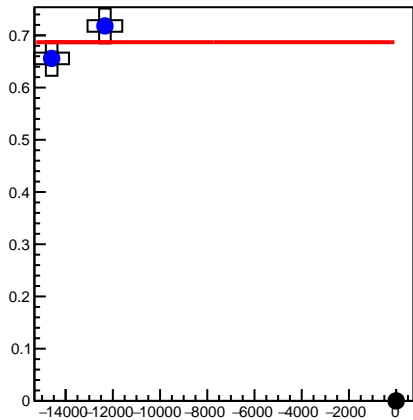
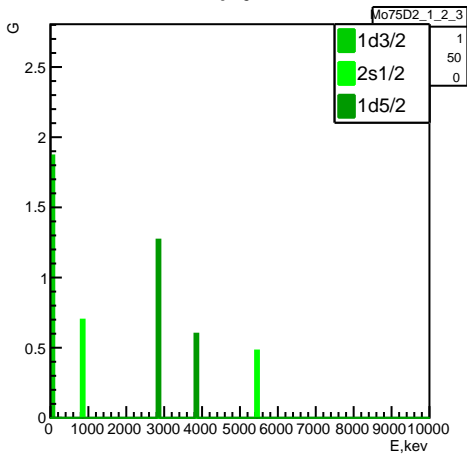
SPE,keV nlj OCC $\frac{G^+ + G^-}{2J+1}$

0 2s1/2 0 0.719

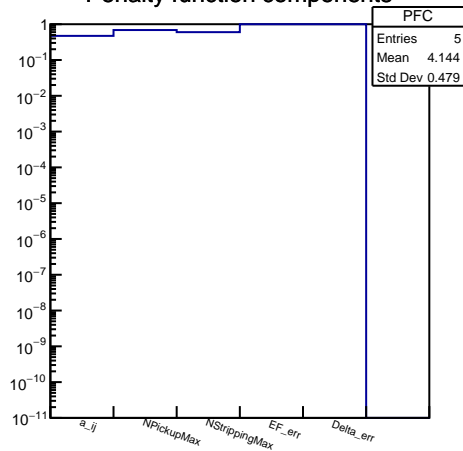
-12145.5 1d5/2 0.7055 0.36

-14582.1 Error!n=1009 l=0 j=0/2 0.68 0

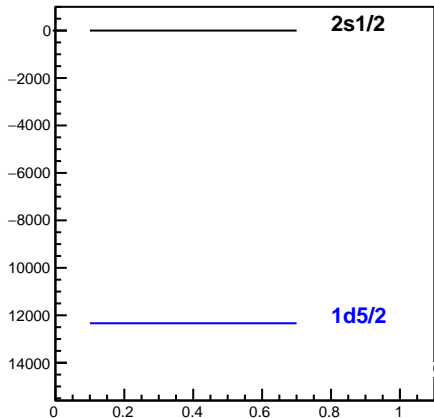
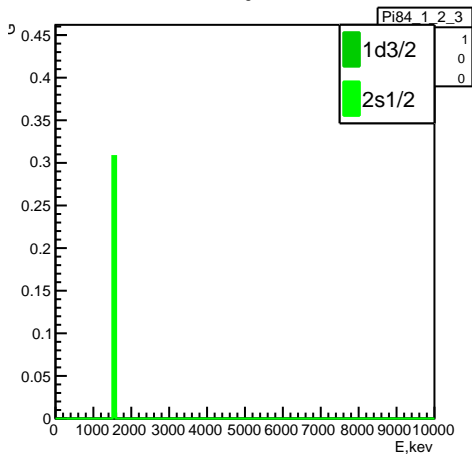
Mo75D2



Penalty function components



Pi84



Experiment: Mo75D2 (5) Pi84 (2)

neutron transfer

n separation energy A:11415.5, A+1: 6985.2

E_F: 1.95869e+08 \pm 4.72861e+10 keV Δ : -4.85991e+08 \pm 1.17299e+11 keV

penalty: 6.59041e+10

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

0 2s1/2 0 0.744

-12336.3 1d5/2 0.718 0.311667

-14592.4 Error!n=8209 l=0 j=0/2 0.655833 0