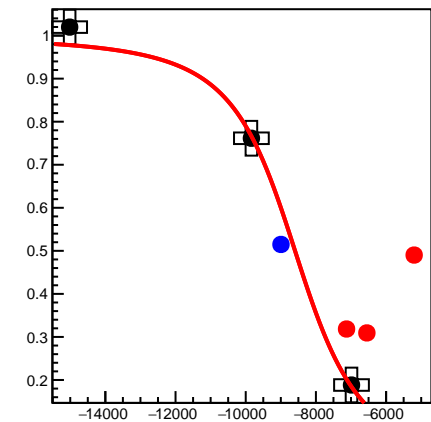
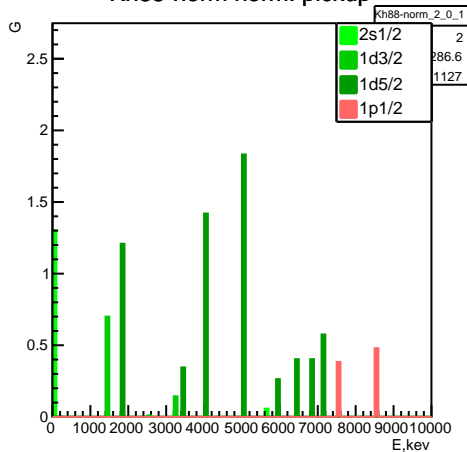
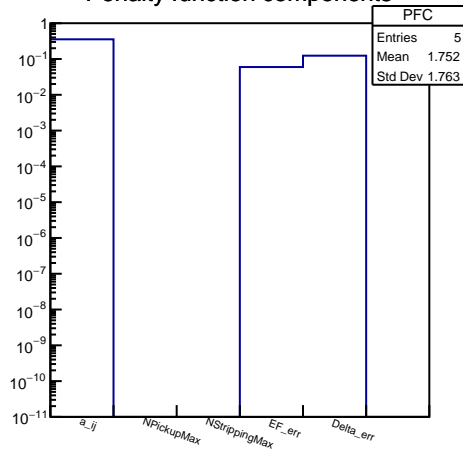


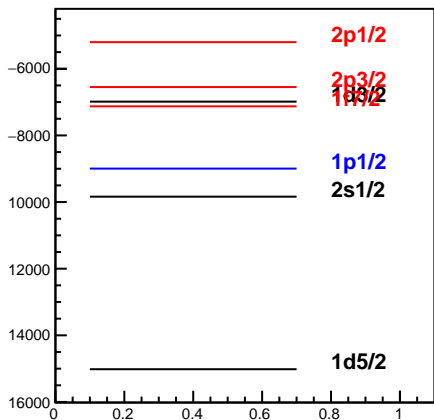
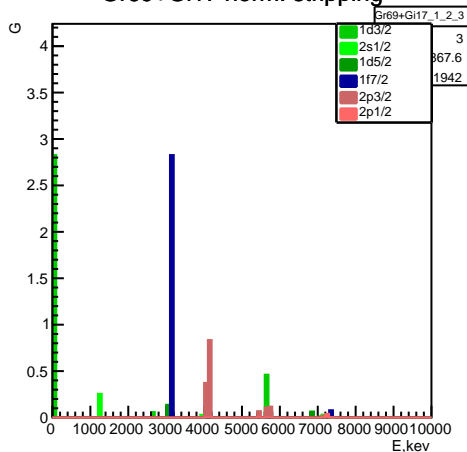
Kh88-norm. pickup



Penalty function components



Gr69+Gi17 norm. stripping



Experiment: Kh88-norm (15) Gr69+Gi17 (19)

proton transfer\_norm

 $n^+ = 0.981558 \pm 0$   $n^- = 1.05407 \pm 0$ 

penalty: 0.124977

 $E_F: -8594.58 \pm 222.901$  keV $\Delta: 1975.2 \pm 303.934$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-9838.18 2s1/2 0.761503 0.839068

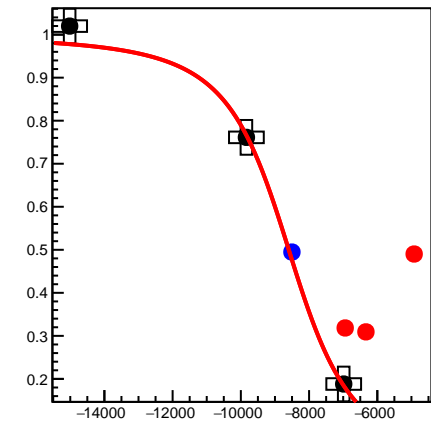
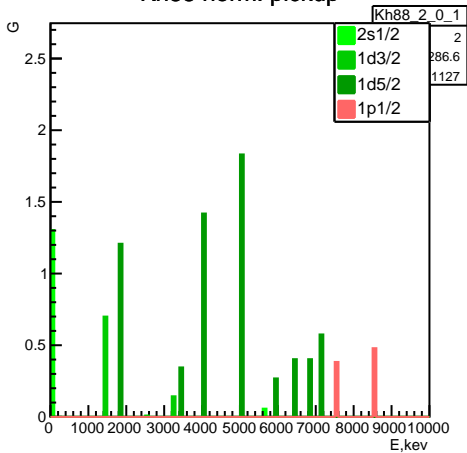
-6986.01 1d3/2 0.188323 1.0502

-15017.2 1d5/2 1.0197 1.11073

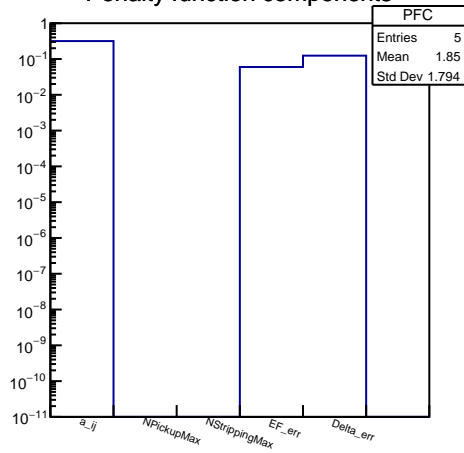
-8995.56 1p1/2 0.514848 0.833591

-7127.15 1f7/2 0.318412 0.363176

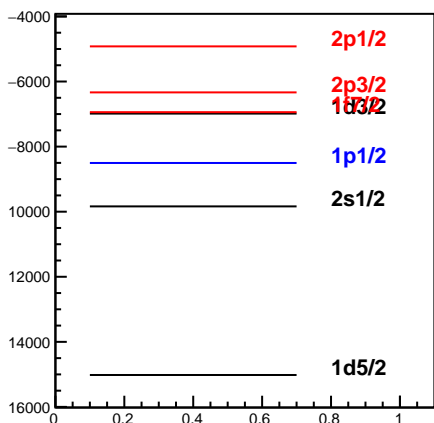
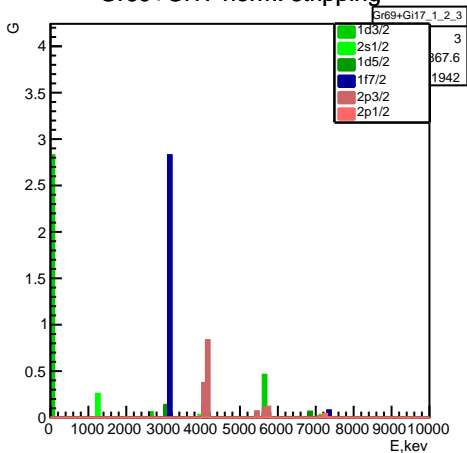
Kh88 norm. pickup



Penalty function components



Gr69+Gi17 norm. stripping



Experiment: Kh88 (15) Gr69+Gi17 (19)

proton transfer\_norm

 $n^+ = 0.981895 \pm 0$   $n^- = 0.958624 \pm 0$ 

penalty: 0.125062

 $E_F: -8595.21 \pm 223.331$  keV $\Delta: 1975.02 \pm 304.609$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-9837.19 2s1/2 0.761269 0.838708

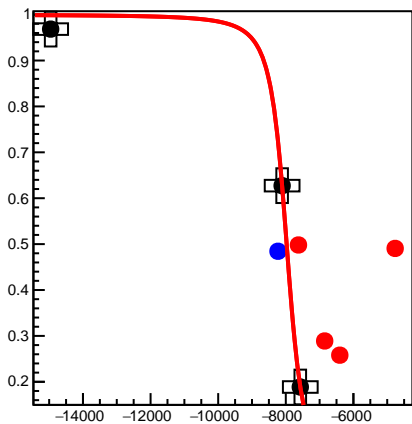
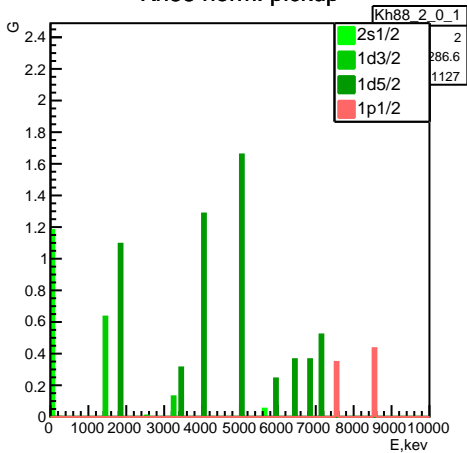
-6984.92 1d3/2 0.188114 1.05036

-15018.2 1d5/2 1.01979 1.11093

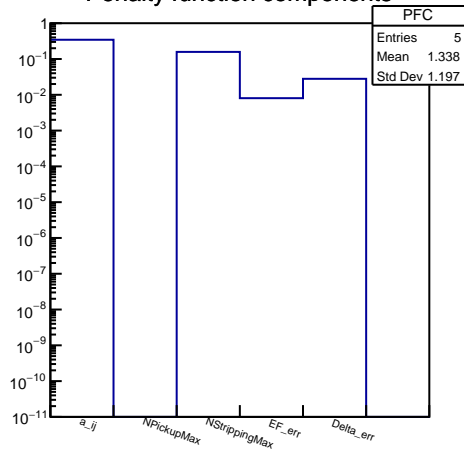
-8502.97 1p1/2 0.494764 0.873234

-6941.73 1f7/2 0.318349 0.363301

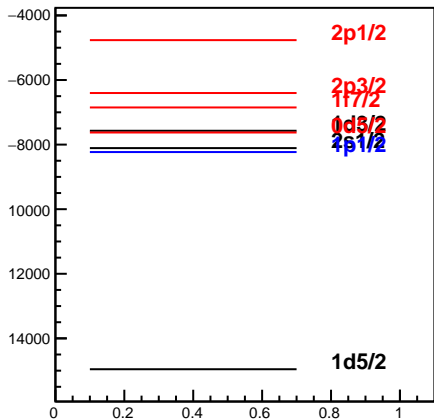
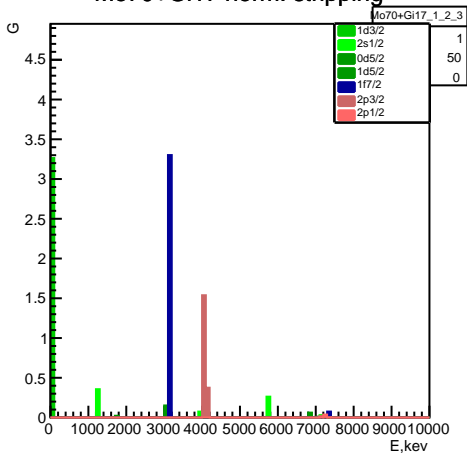
Kh88 norm. pickup



Penalty function components



Mo70+Gi17 norm. stripping



Experiment: Kh88 (15) Mo70+Gi17 (16)

proton transfer\_norm

$$n^+ = 0.937906 \pm 0 \quad n^- = 0.86871 \pm 0$$

penalty: 0.130049

$$E_F: -7975.01 \pm 30.0645 \text{ keV}$$

$$\Delta: -507.93 \pm 68.6172 \text{ keV}$$

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

$$-8108.63 \text{ 2s1/2 } 0.627376 \text{ 0.978815}$$

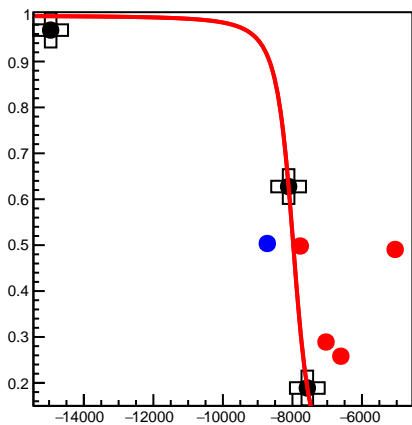
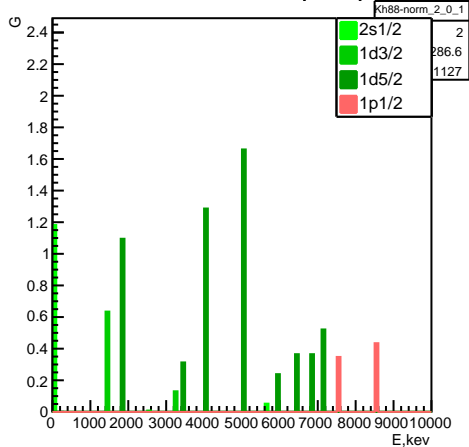
$$-7571.44 \text{ 1d3/2 } 0.188655 \text{ 1.00927}$$

$$-14956 \text{ 1d5/2 } 0.968443 \text{ 1.01192}$$

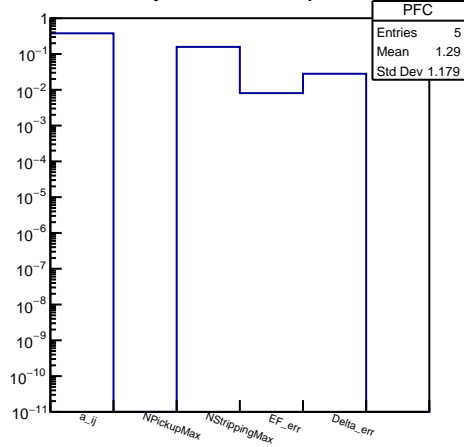
$$-8230.8 \text{ 1p1/2 } 0.484431 \text{ 0.812977}$$

$$-7625.38 \text{ 0d5/2 } 0.498124 \text{ 0.00375162}$$

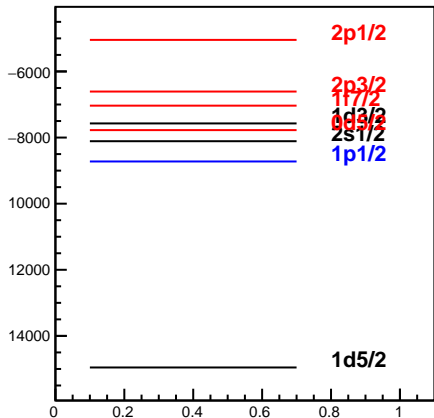
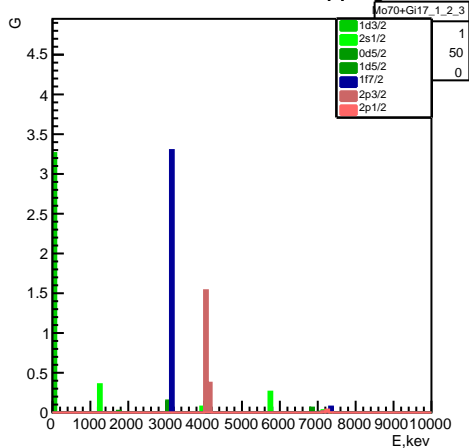
Kh88-norm. pickup



Penalty function components



Mo70+Gi17 norm. stripping



Experiment: Kh88-norm (15) Mo70+Gi17 (16)

proton transfer\_norm

 $n^+ = 0.937616 \pm 0$   $n^- = 0.955236 \pm 0$ 

penalty: 0.136334

 $E_F: -7976.28 \pm 30.1816$  keV $\Delta: -508.881 \pm 68.8406$  keVSPE,kev nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-8110.43 2s1/2 0.627629 0.979097

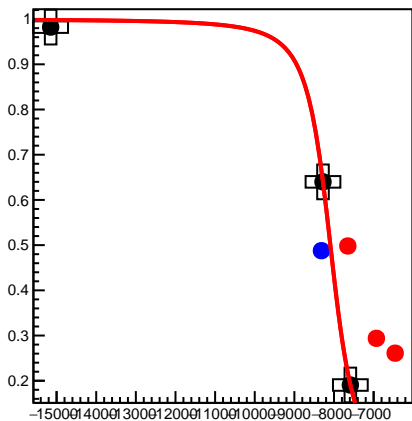
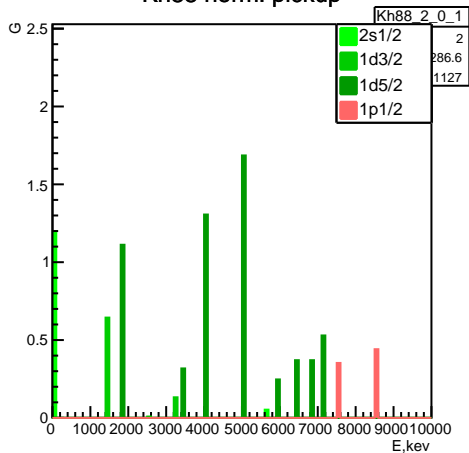
-7572.36 1d3/2 0.188843 1.00914

-14955.1 1d5/2 0.968378 1.01177

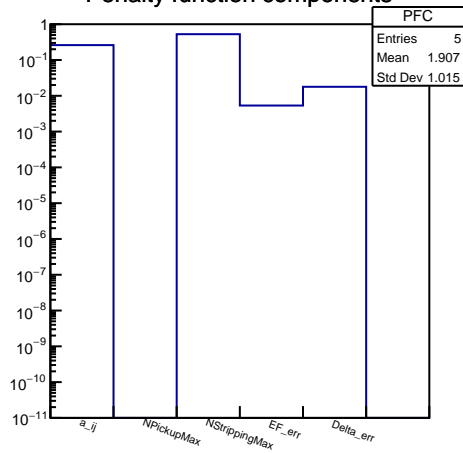
-8723.33 1p1/2 0.503608 0.775123

-7774.74 0d5/2 0.498125 0.00375046

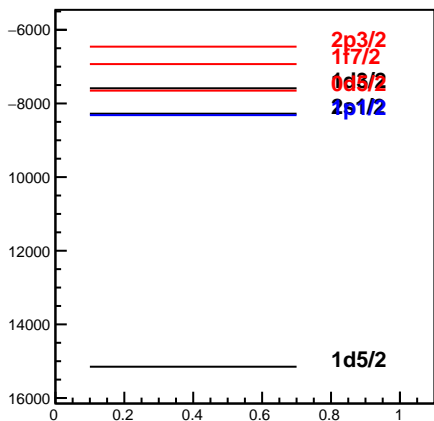
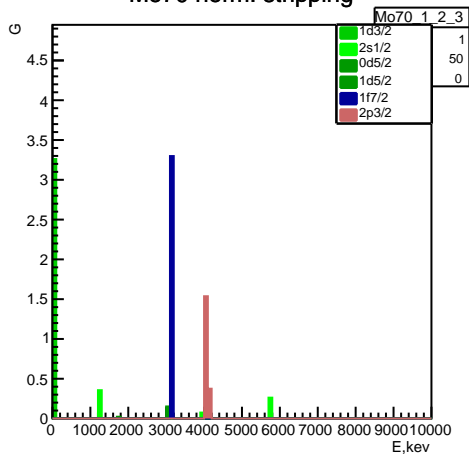
Kh88 norm. pickup



Penalty function components



Mo70 norm. stripping



Experiment: Kh88 (15) Mo70 (9)

proton transfer\_norm

 $n^+ = 0.937014 \pm 0$   $n^- = 0.882501 \pm 0$ 

penalty: 0.193529

 $E_F: -8091.66 \pm 19.9615$  keV $\Delta: -640.365 \pm 43.7952$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-8278.1 2s1/2 0.63994 0.973271

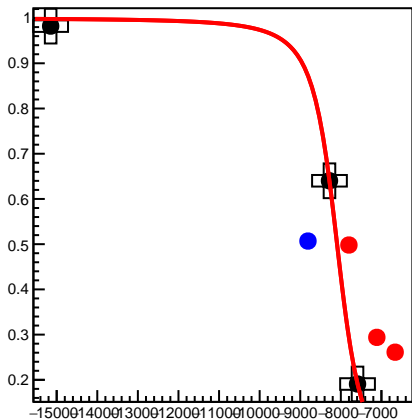
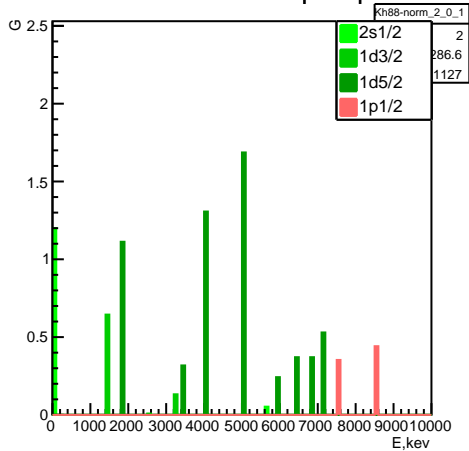
-7587.73 1d3/2 0.190577 1.01156

-15149.8 1d5/2 0.982286 1.01517

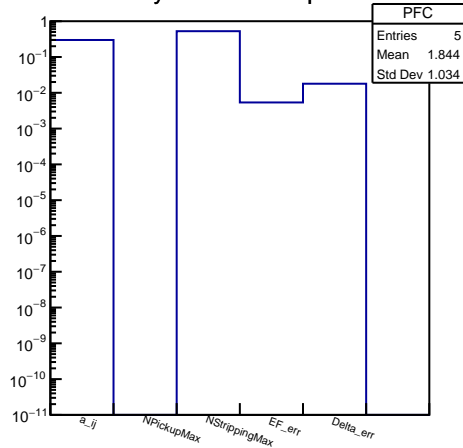
-8317.09 1p1/2 0.487735 0.818781

-7651.54 0d5/2 0.498126 0.00374805

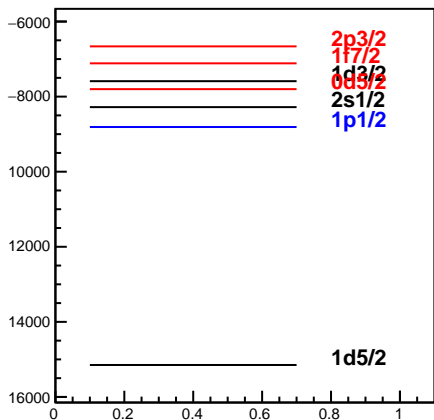
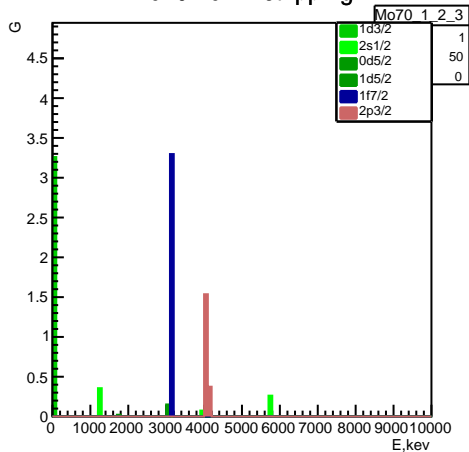
Kh88-norm. pickup



Penalty function components



Mo70 norm. stripping



Experiment: Kh88-norm (15) Mo70 (9)

proton transfer\_norm

 $n^+ = 0.936719 \pm 0$   $n^- = 0.970396 \pm 0$ 

penalty: 0.2028

 $E_F: -8092.71 \pm 20.0728$  keV $\Delta: -641.259 \pm 44.0032$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-8279.84 2s1/2 0.640193 0.973559

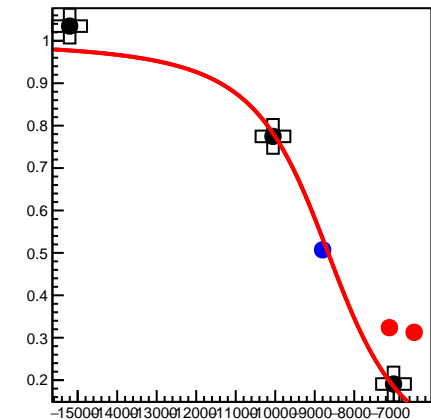
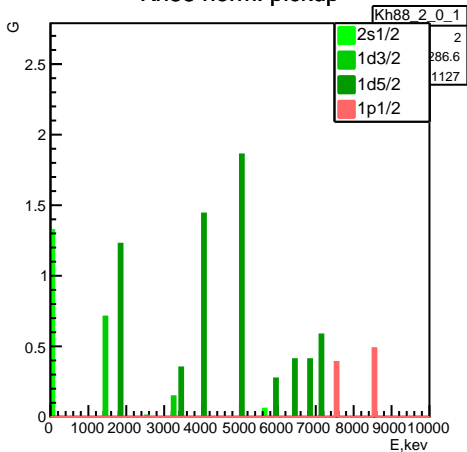
-7588.66 1d3/2 0.190768 1.01143

-15148.8 1d5/2 0.982216 1.01501

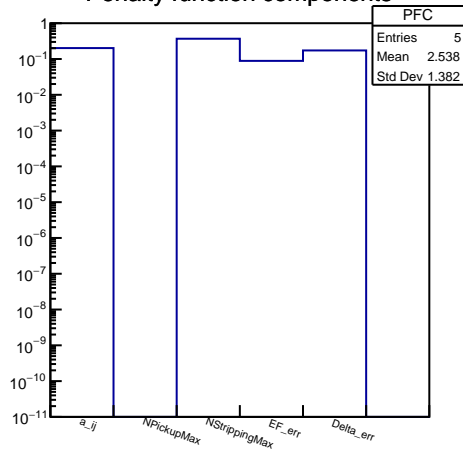
-8809.71 1p1/2 0.506895 0.780964

-7800.93 0d5/2 0.498127 0.00374688

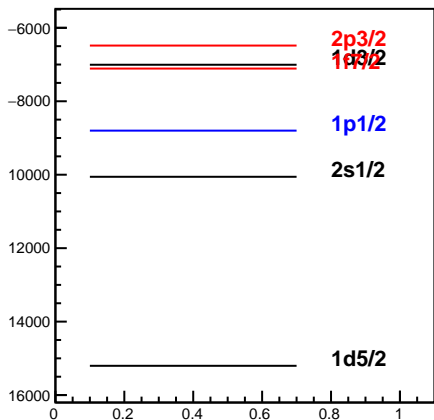
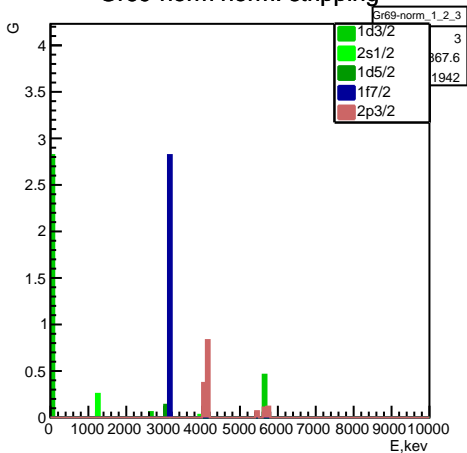
Kh88 norm. pickup



Penalty function components



Gr69-norm norm. stripping



Experiment: Kh88 (15) Gr69-norm (12)

proton transfer\_norm

 $n^+ = 0.941751 \pm 0$   $n^- = 0.973716 \pm 0$ 

penalty: 0.203457

 $E_F: -8661.54 \pm 331.162$  keV $\Delta: -2044.04 \pm 425.701$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-10056.5 2s1/2 0.774661 0.833354

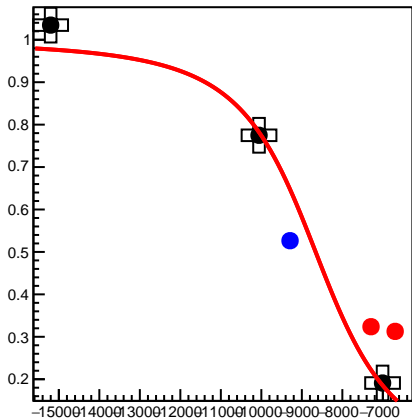
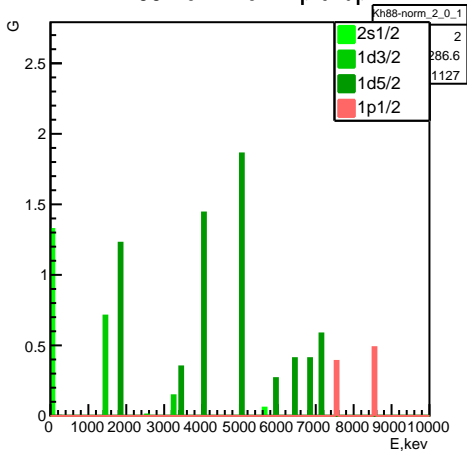
-7005.85 1d3/2 0.190848 1.05161

-15203.3 1d5/2 1.03467 1.11504

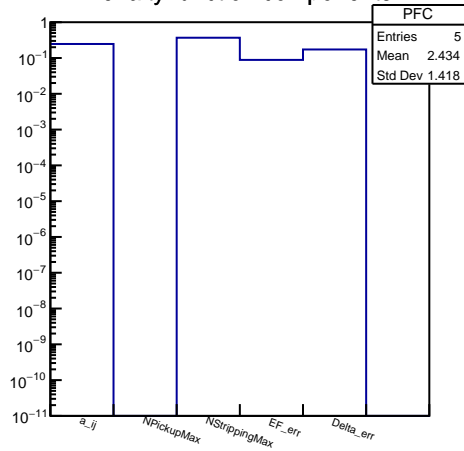
-8799.67 1p1/2 0.507192 0.86196

-7109.66 1f7/2 0.323704 0.352592

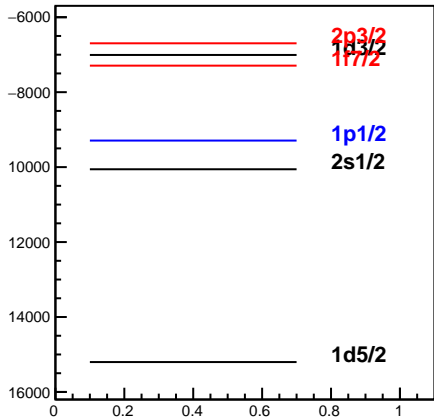
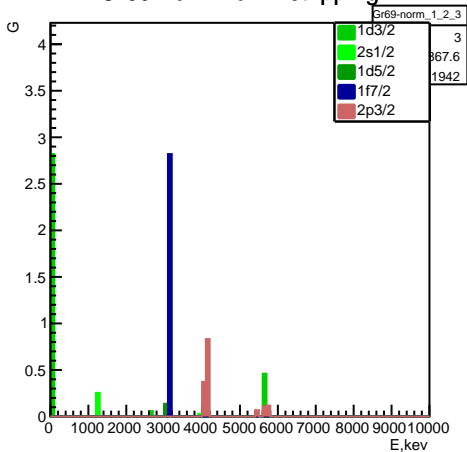
Kh88-norm. pickup



Penalty function components



Gr69-norm. stripping



Experiment: Kh88-norm (15) Gr69-norm (12)

proton transfer\_norm

 $n^+ = 0.941422 \pm 0$   $n^- = 1.07066 \pm 0$ 

penalty: 0.204427

 $E_F: -8660.06 \pm 330.621$  keV $\Delta: -2044.2 \pm 424.906$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-10057.4 2s1/2 0.774894 0.833721

-7006.96 1d3/2 0.191059 1.05145

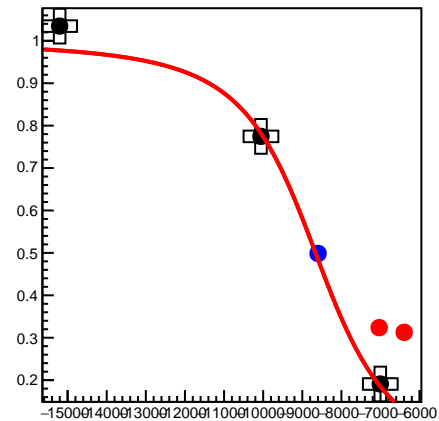
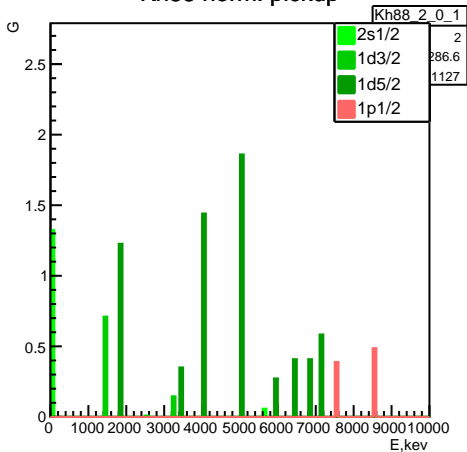
-15202.2 1d5/2 1.03457 1.11483

-9291.52 1p1/2 0.526462 0.823949

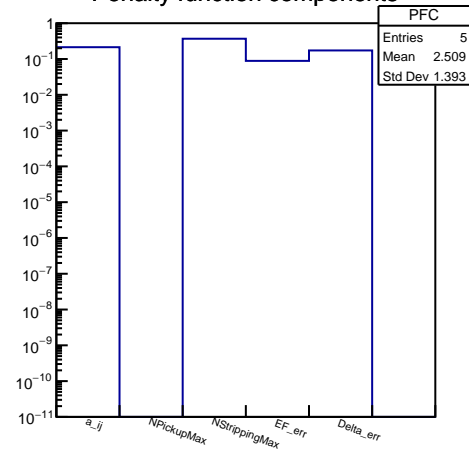
-7292.09 1f7/2 0.323766 0.352468



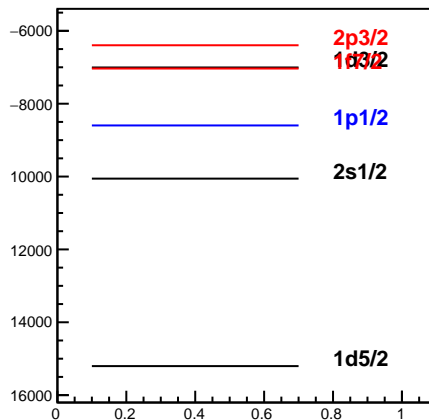
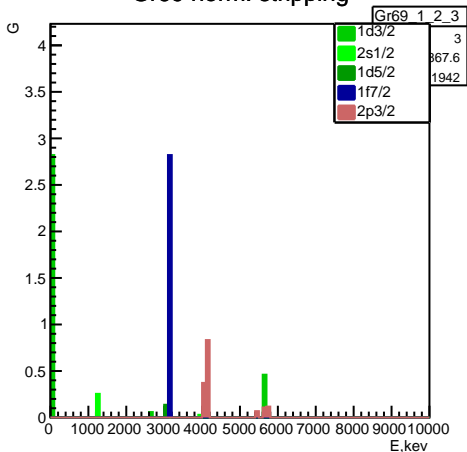
Kh88 norm. pickup



Penalty function components



Gr69 norm. stripping



Experiment: Kh88 (15) Gr69 (12)

proton transfer\_norm

 $n^+ = 0.979421 \pm 0$   $n^- = 0.973716 \pm 0$ 

penalty: 0.206652

 $E_F: -8661.54 \pm 331.162$  keV $\Delta: -2044.04 \pm 425.7$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-10056.5 2s1/2 0.774661 0.833354

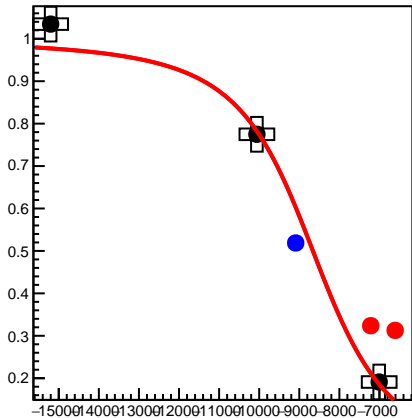
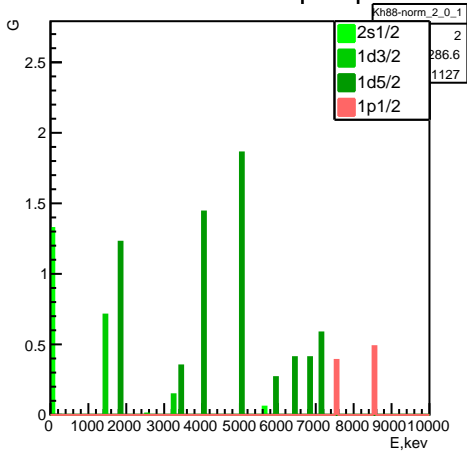
-7005.85 1d3/2 0.190848 1.05161

-15203.3 1d5/2 1.03467 1.11504

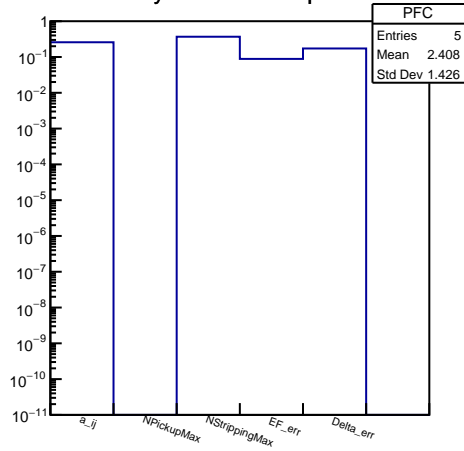
-8596.81 1p1/2 0.498716 0.878912

-7034.42 1f7/2 0.323704 0.352592

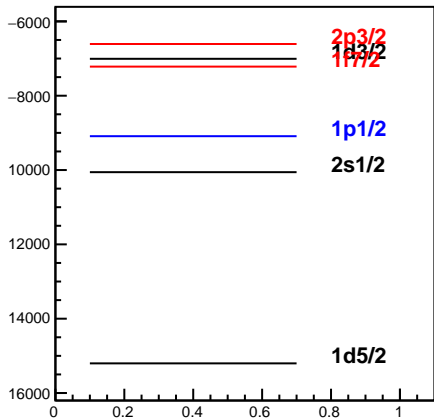
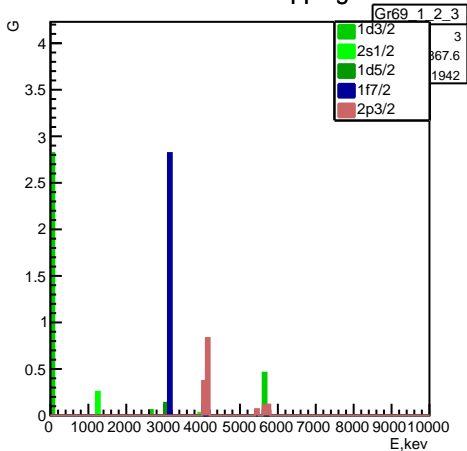
Kh88-norm. pickup



Penalty function components



Gr69 norm. stripping



Experiment: Kh88-norm (15) Gr69 (12)

proton transfer\_norm

 $n^+ = 0.979079 \pm 0$   $n^- = 1.07066 \pm 0$ 

penalty: 0.207755

 $E_F: -8660.06 \pm 330.621$  keV $\Delta: -2044.2 \pm 424.906$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-10057.4 2s1/2 0.774894 0.833721

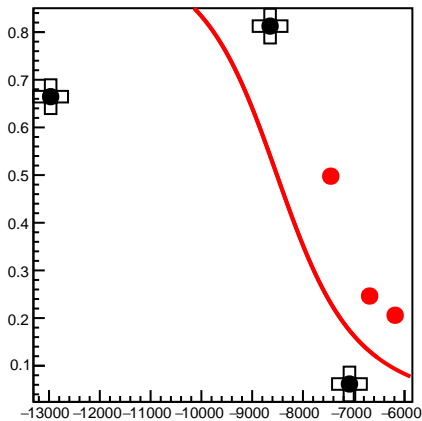
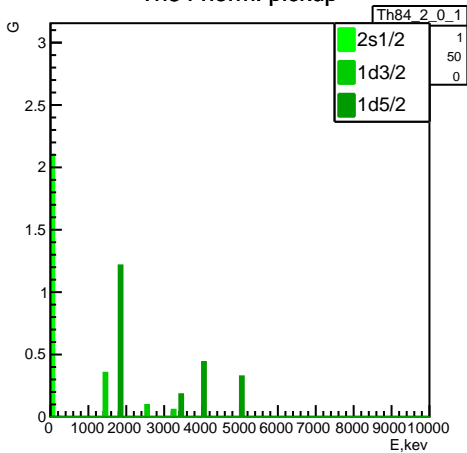
-7006.96 1d3/2 0.191059 1.05145

-15202.2 1d5/2 1.03457 1.11483

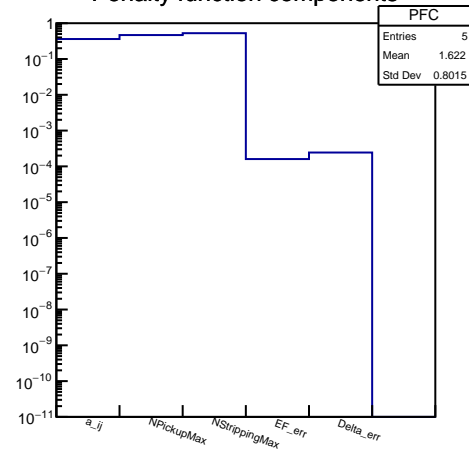
-9089.26 1p1/2 0.518752 0.839369

-7217.07 1f7/2 0.323766 0.352468

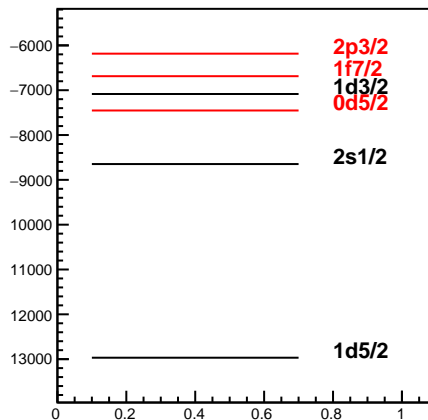
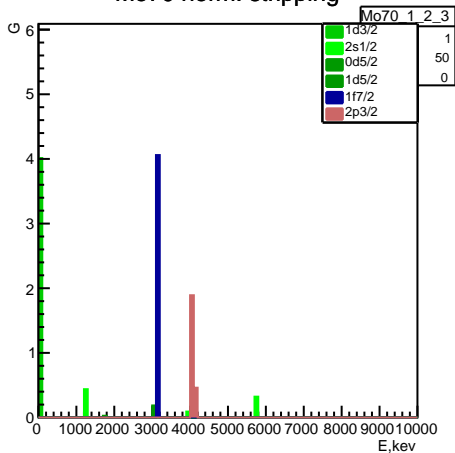
Th84 norm. pickup



Penalty function components



Mo70 norm. stripping



Experiment: Th84 (8) Mo70 (9)

proton transfer\_norm

 $n^+ = 1.1533 \pm 0$   $n^- = 0.95625 \pm 0$ 

penalty: 0.36051

 $E_F: -8512.11 \pm 0.598356$  keV $\Delta: 1661.01 \pm 0.598356$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-8647.45 2s1/2 0.812577 1.4786

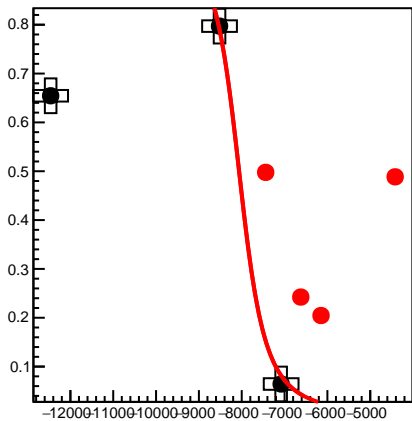
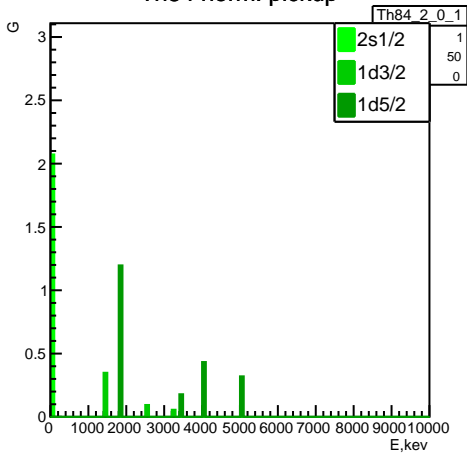
-7084.54 1d3/2 0.0616652 1.13008

-12968 1d5/2 0.664524 0.391327

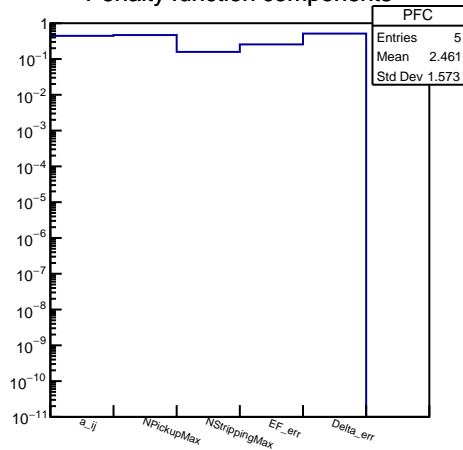
-7452.5 0d5/2 0.497693 0.00461321

-6687.22 1f7/2 0.246274 0.507453

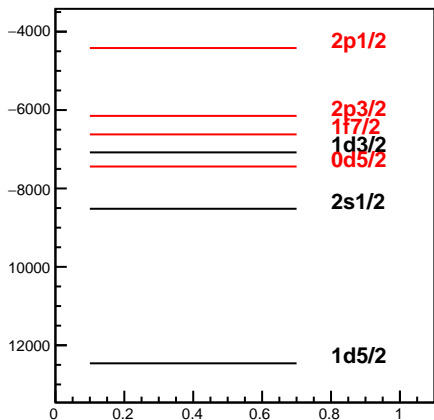
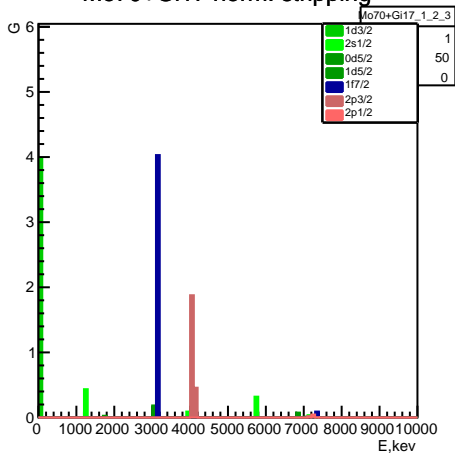
Th84 norm. pickup



Penalty function components



Mo70+Gi17 norm. stripping



Experiment: Th84 (8) Mo70+Gi17 (16)

proton transfer\_norm

 $n^+ = 1.14505 \pm 0$   $n^- = 0.942112 \pm 0$ 

penalty: 0.443997

 $E_F: -8061.27 \pm 955.728$  keV $\Delta: 641.352 \pm 1259.57$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-8518.15 2s1/2 0.797167 1.47831

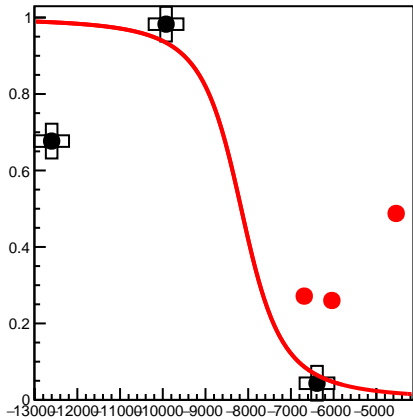
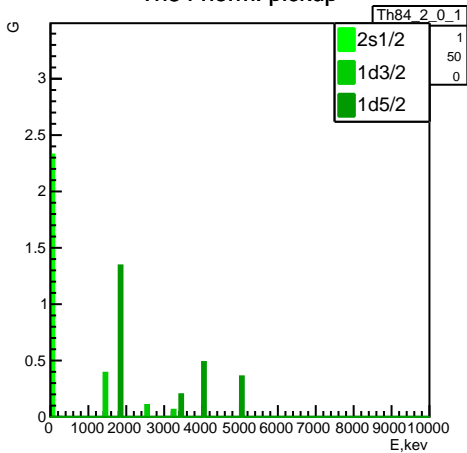
-7079.67 1d3/2 0.0643184 1.12102

-12461 1d5/2 0.65453 0.400664

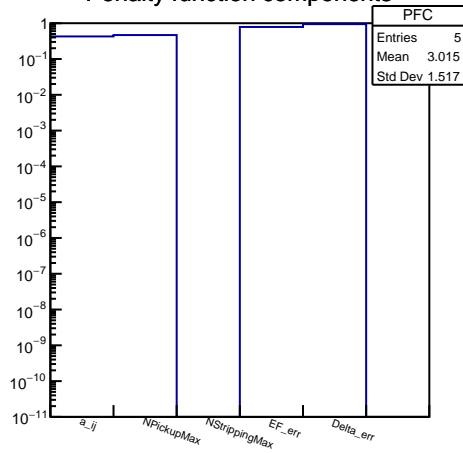
-7440.51 0d5/2 0.49771 0.0045802

-6620.95 1f7/2 0.242364 0.515272

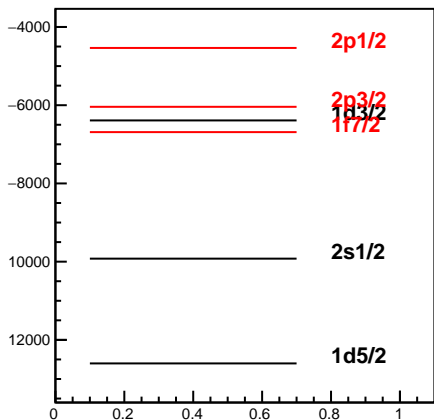
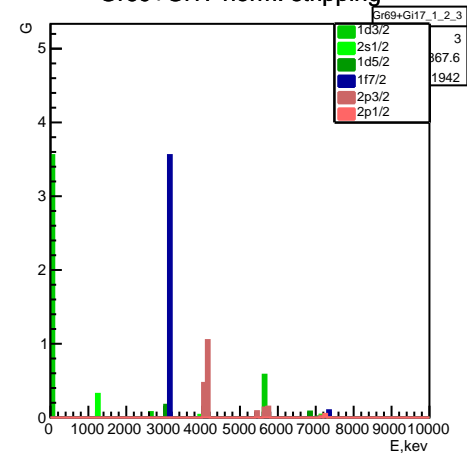
Th84 norm. pickup



Penalty function components



Gr69+Gi17 norm. stripping



Experiment: Th84 (8) Gr69+Gi17 (19)

proton transfer\_norm

 $n^+ = 1.23532 \pm 0$   $n^- = 1.05838 \pm 0$ 

penalty: 0.634874

 $E_F: -8162.95 \pm 2935.37$  keV $\Delta: -1003.78 \pm 2314.22$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-9922.75 2s1/2 0.982668 1.36311

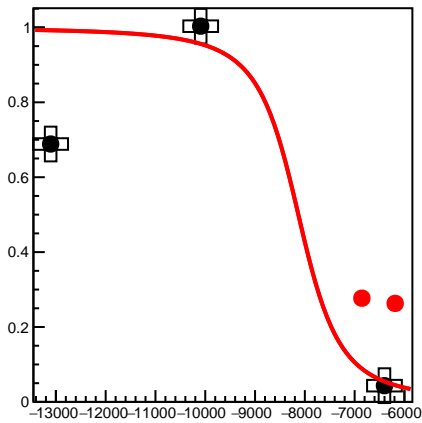
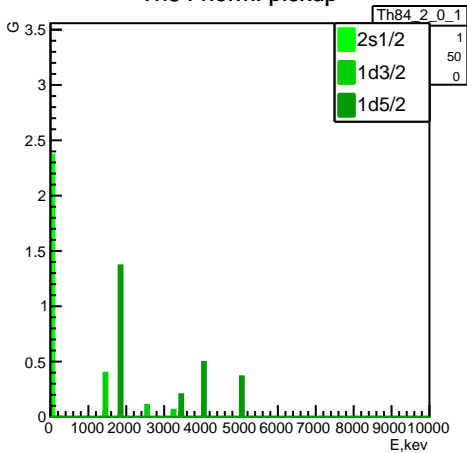
-6389.19 1d3/2 0.0435619 1.19335

-12601.5 1d5/2 0.676887 0.443542

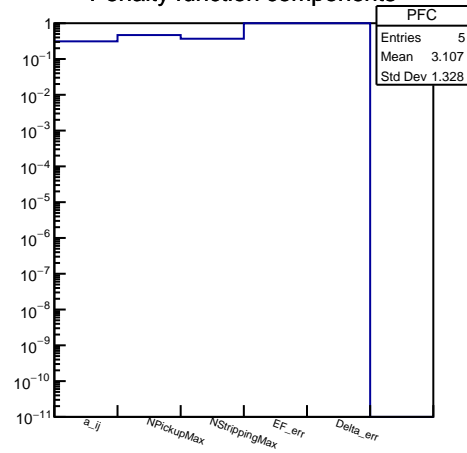
-6688.03 1f7/2 0.271465 0.457069

-6041.05 2p3/2 0.260039 0.479923

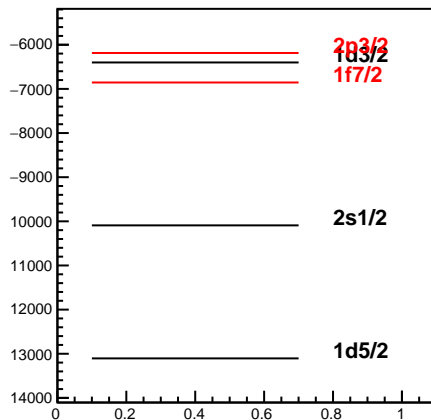
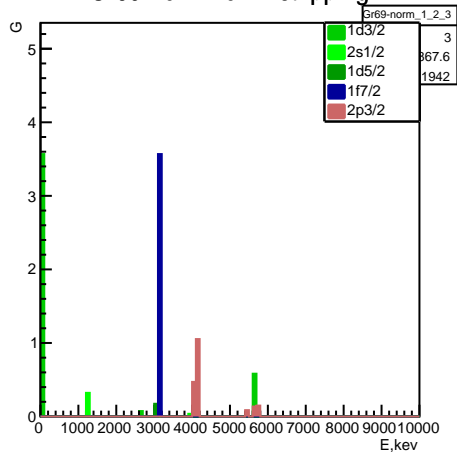
Th84 norm. pickup



Penalty function components



Gr69-norm norm. stripping



Experiment: Th84 (8) Gr69-norm (12)

proton transfer\_norm

 $n^+ = 1.19126 \pm 0$   $n^- = 1.07837 \pm 0$ 

penalty: 0.753726

 $E_F: -8130.15 \pm 3736.33$  keV $\Delta: -881.749 \pm 2455.07$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-10091.6 2s1/2 1.00328 1.36585

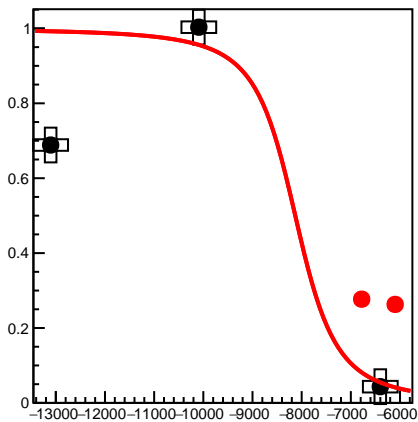
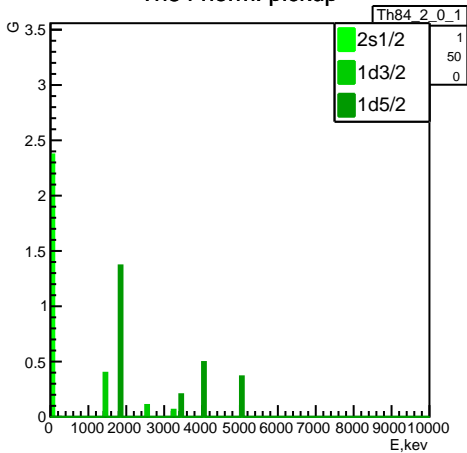
-6401.05 1d3/2 0.0433579 1.19905

-13105 1d5/2 0.68864 0.435095

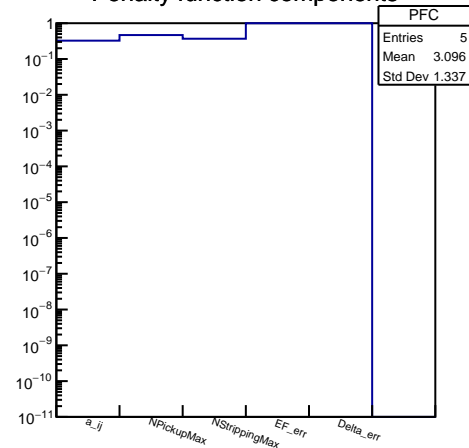
-6854.79 1f7/2 0.276997 0.446007

-6186.2 2p3/2 0.263059 0.473882

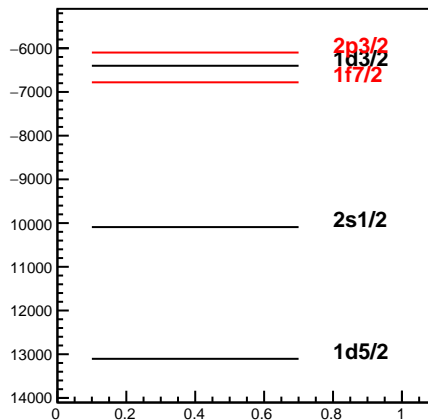
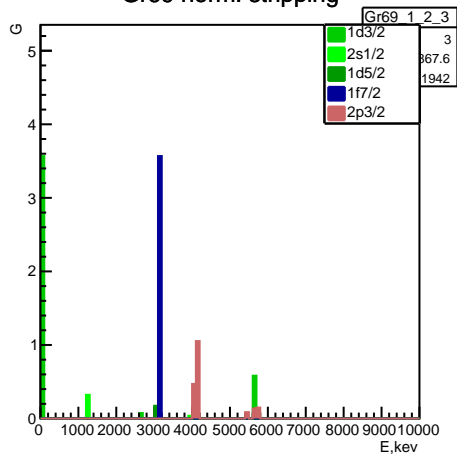
Th84 norm. pickup



Penalty function components



Gr69 norm. stripping



Experiment: Th84 (8) Gr69 (12)

proton transfer\_norm

 $n^+ = 1.23891 \pm 0$   $n^- = 1.07837 \pm 0$ 

penalty: 0.757465

 $E_F: -8130.15 \pm 3736.33$  keV $\Delta: -881.749 \pm 2455.07$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-10091.6 2s1/2 1.00328 1.36585

-6401.05 1d3/2 0.0433579 1.19905

-13105 1d5/2 0.68864 0.435095

-6779.82 1f7/2 0.276997 0.446007

-6098.77 2p3/2 0.263059 0.473882