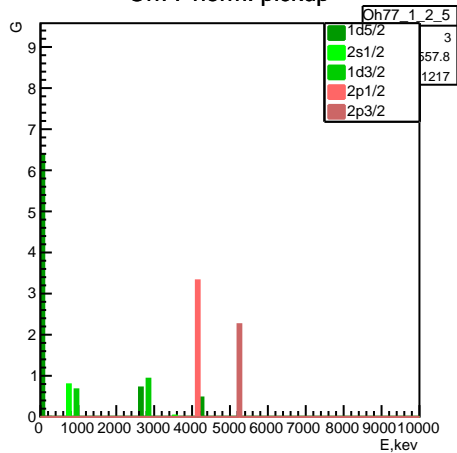
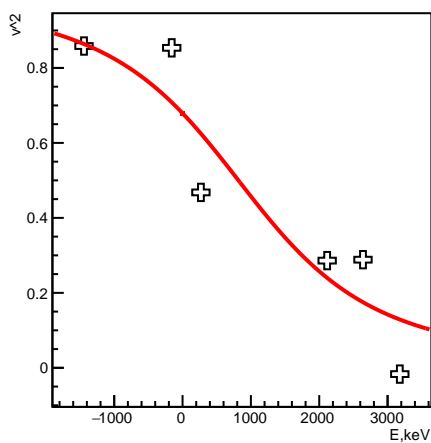


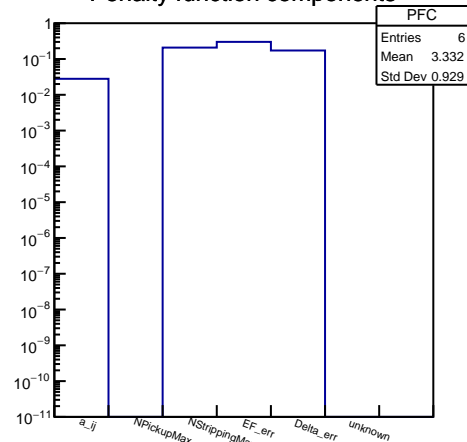
Oh77 norm. pickup



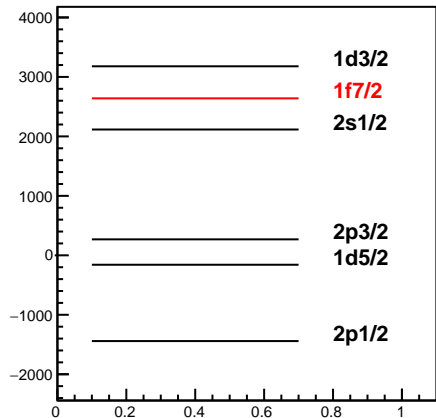
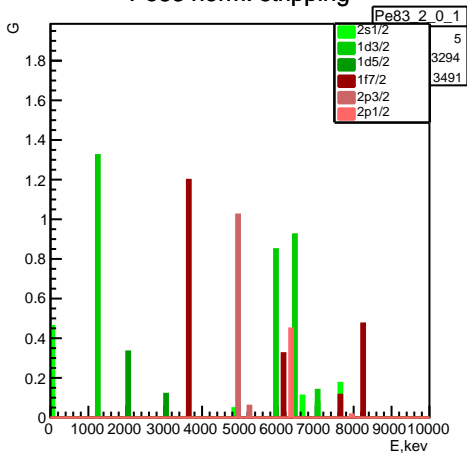
Occupancy\_norm



Penalty function components



Pe83 norm. stripping



Experiment: Oh77 (9) Pe83 (19)

neutron transfer\_norm

 $n^+ = 0.624487 \pm 0$   $n^- = 1.52401 \pm 0$ 

penalty: 0.146152

 $E_F: 818.105 \pm 423.789$  keV $\Delta: 2130.68 \pm 713.496$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-158.329 1d5/2 0.853667 0.949333

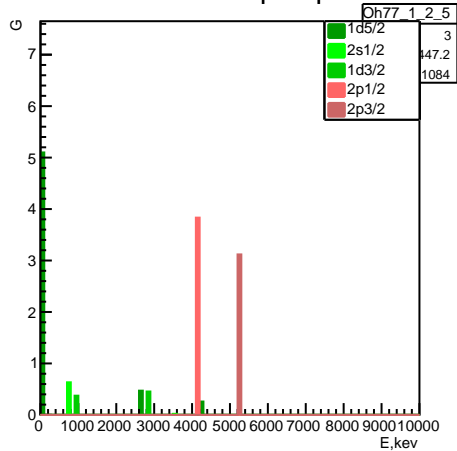
2115.83 2s1/2 0.286 0.97

3178.73 1d3/2 -0.01675 1.5585

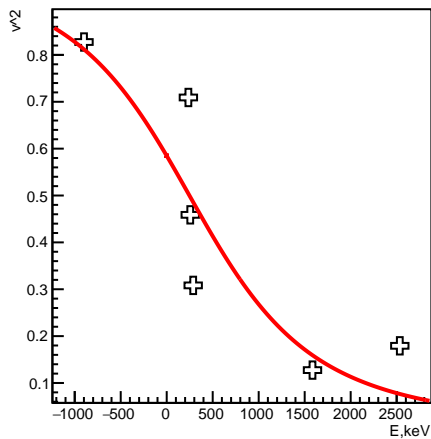
-1441.9 2p1/2 0.8585 1.463

268.693 2p3/2 0.468 0.804

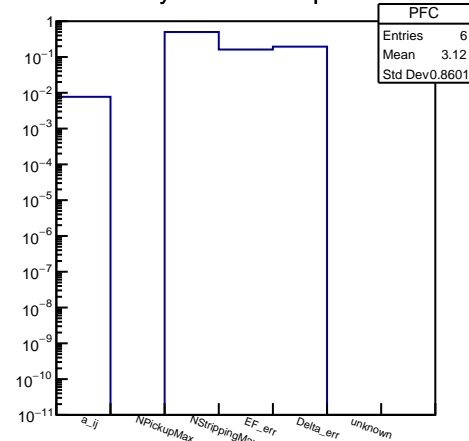
Oh77 norm. pickup



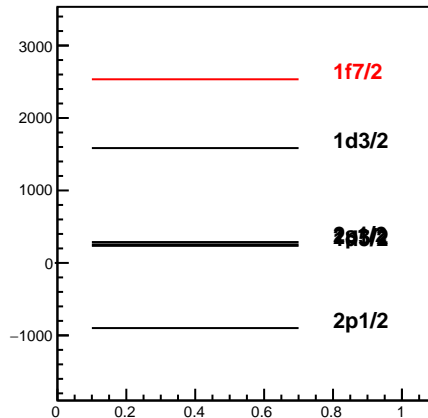
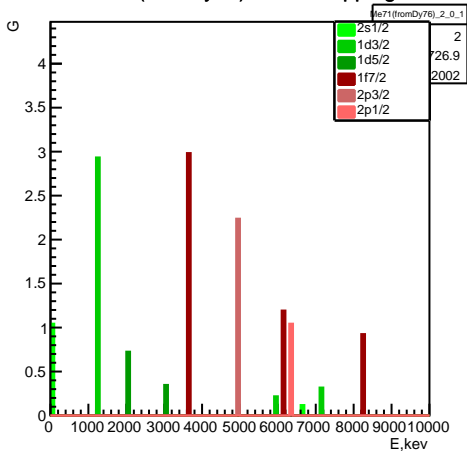
Occupancy\_norm



Penalty function components



Me71(fromDy76) norm. stripping



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

neutron transfer\_norm

 $n^+ = 0.994591 \pm 0$   $n^- = 1.62424 \pm 0$ 

penalty: 0.161532

 $E_F: 246.98 \pm 227.689$  keV $\Delta: -1436.56 \pm 803.818$  keV

| SPE, keV | nlj   | OCC      | $\frac{G^+ + G^-}{2J+1}$ |
|----------|-------|----------|--------------------------|
| 235.611  | 1d5/2 | 0.709167 | 0.778333                 |

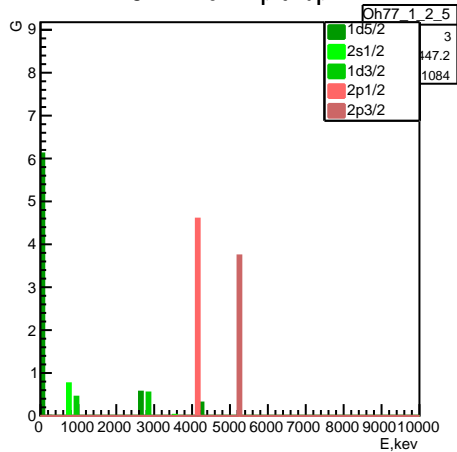
287.945 2s1/2 0.30825 0.7865

1584.87 1d3/2 0.1275 1

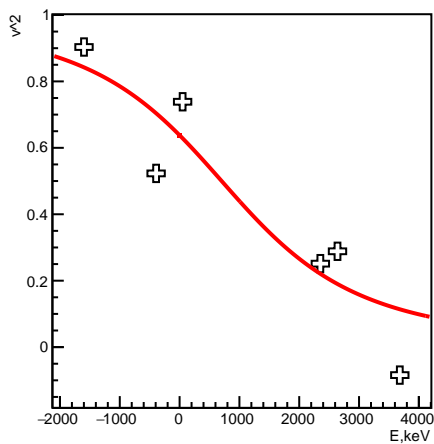
-899.136 2p1/2 0.8275 1.705

255.878 2p3/2 0.45875 1.0425

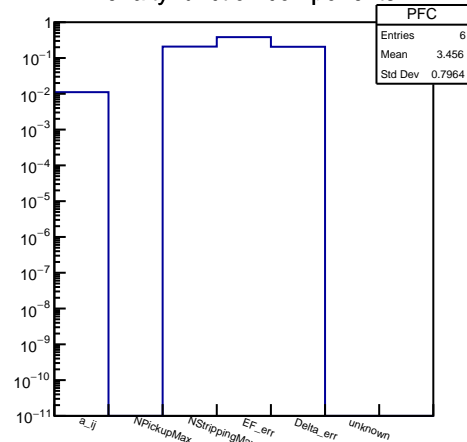
Oh77 norm. pickup



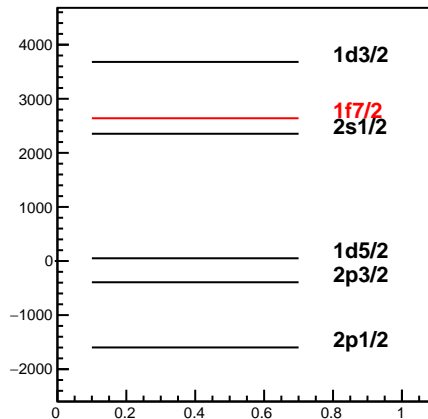
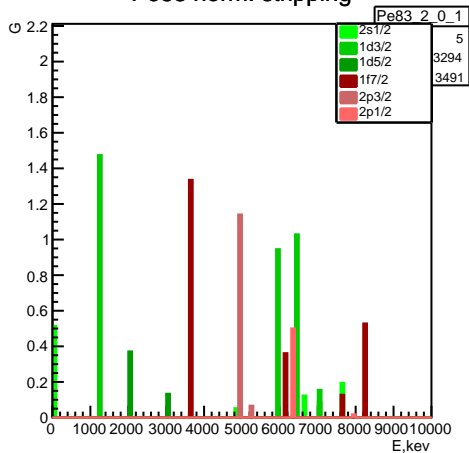
Occupancy\_norm



Penalty function components



Pe83 norm. stripping



Experiment: Oh77 (9) Pe83 (19)

neutron transfer\_norm

 $n^+ = 0.695647 \pm 0$   $n^- = 1.94848 \pm 0$ 

penalty: 0.166654

 $E_F: 703.174 \pm 539.115$  keV $\Delta: 2450.63 \pm 849.516$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

50.5341 1d5/2 0.738667 0.719333

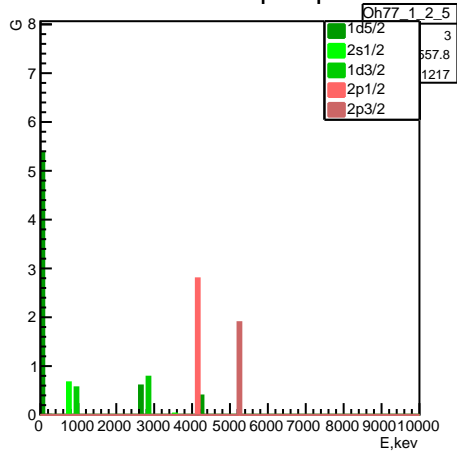
2353.18 2s1/2 0.25125 0.9005

3681.62 1d3/2 -0.08425 1.4235

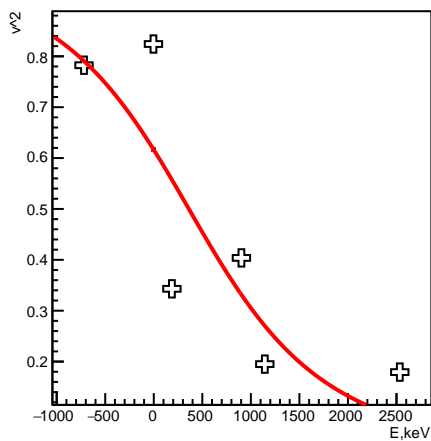
-1598.15 2p1/2 0.9035 1.553

-392.715 2p3/2 0.523 0.914

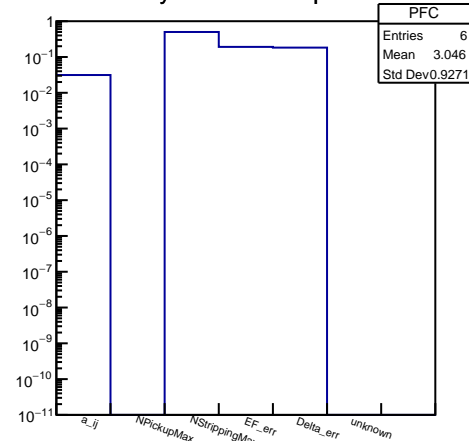
Oh77 norm. pickup



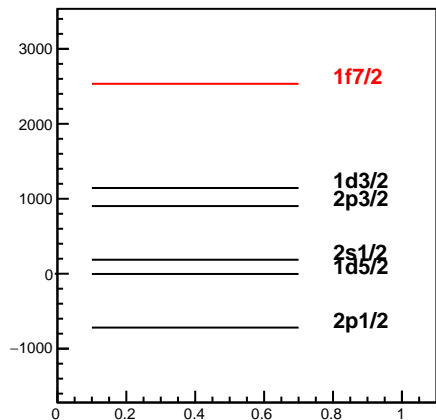
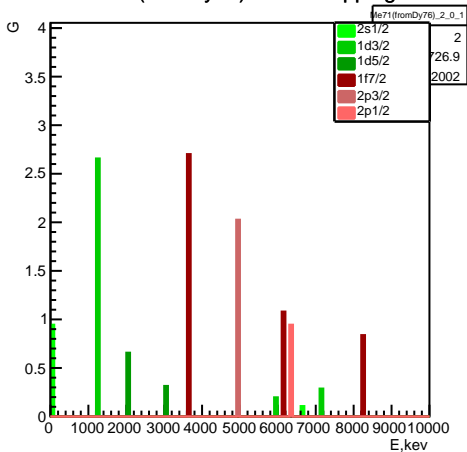
Occupancy\_norm



Penalty function components



Me71(fromDy76) norm. stripping



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

neutron transfer\_norm

 $n^+ = 0.900881 \pm 0$   $n^- = 1.28308 \pm 0$ 

penalty: 0.171383

 $E_F: 361.294 \pm 269.835$  keV $\Delta: 1511.38 \pm 755.622$  keV

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

-3.24684 1d5/2 0.824167 1.00833

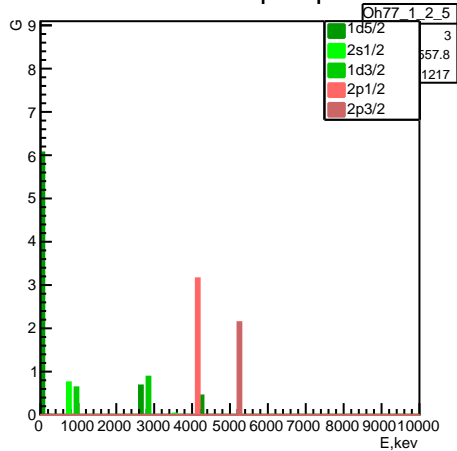
186.658 2s1/2 0.343 0.856

1143.73 1d3/2 0.195 1.135

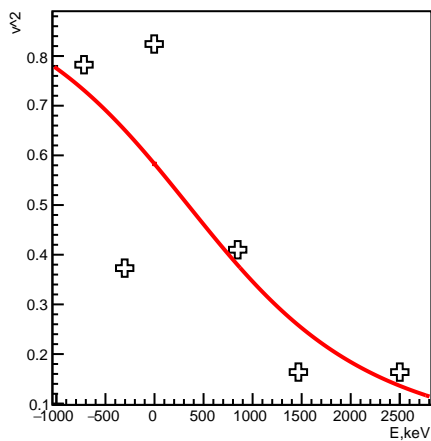
-718.637 2p1/2 0.7825 1.615

902.651 2p3/2 0.40375 0.9325

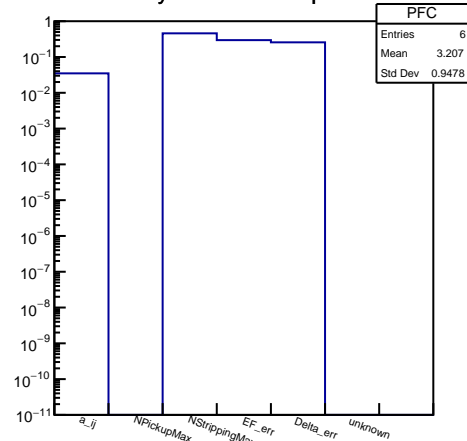
Oh77 norm. pickup



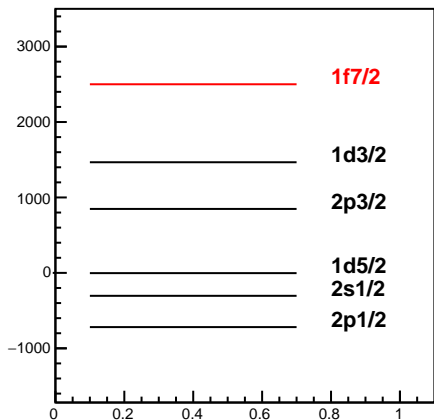
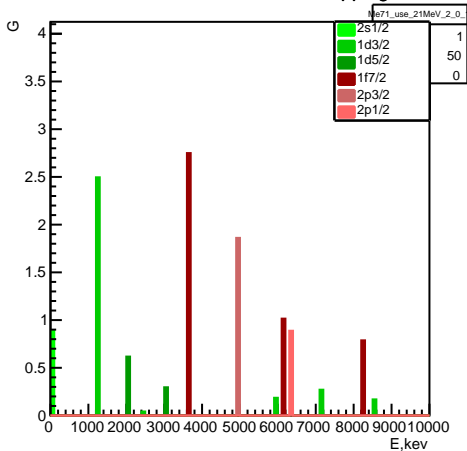
Occupancy\_norm



Penalty function components



Me71\_use\_21MeV norm. stripping



Experiment: Oh77 (9) Me71\_use\_21MeV (13)

neutron transfer\_norm

 $n^+ = 0.846097 \pm 0$   $n^- = 1.44715 \pm 0$ 

penalty: 0.241916

 $E_F: 341.424 \pm 416.923$  keV $\Delta: 2034.07 \pm 1060.77$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$   
-3.24684 1d5/2 0.824167 1.00833

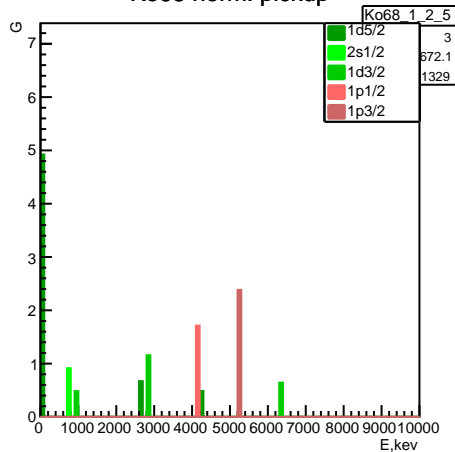
-303.99 2s1/2 0.373 0.796

1466.68 1d3/2 0.16375 1.1975

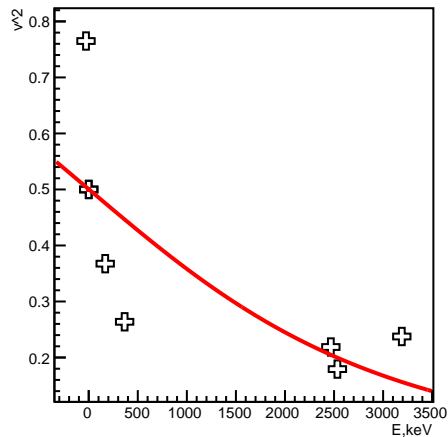
-718.637 2p1/2 0.7825 1.615

847.87 2p3/2 0.41 0.92

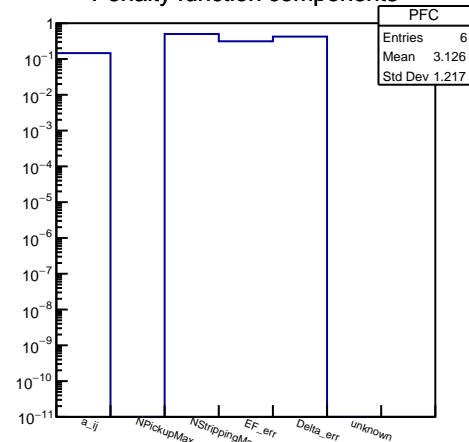
Ko68 norm. pickup



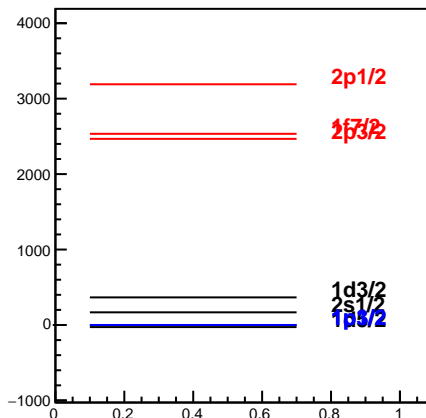
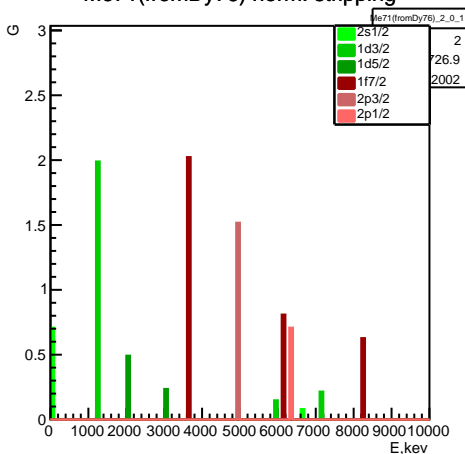
Occupancy\_norm



Penalty function components



Me71(fromDy76) norm. stripping



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

neutron transfer\_norm

 $n^+ = 0.674525 \pm 0$   $n^- = 1.42733 \pm 0$ 

penalty: 0.251673

 $E_F: 3.28289 \pm 439.895$  keV $\Delta: 3368.28 \pm 1743.4$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-27.7752 1d5/2 0.765 0.89

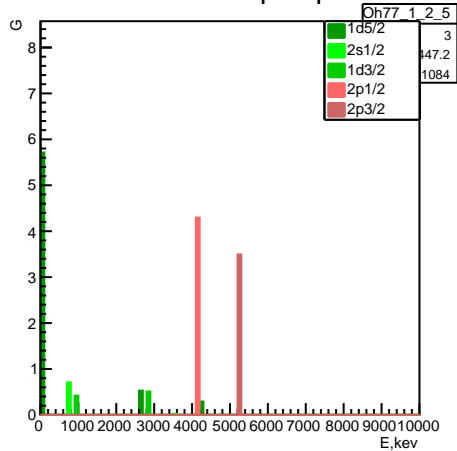
167.81 2s1/2 0.3675 0.905

365.819 1d3/2 0.26375 1.2725

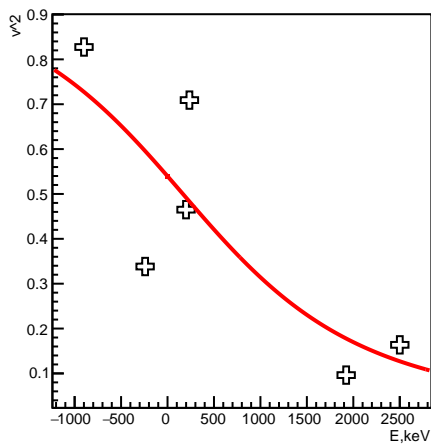
0 1p1/2 0.5 1.2

0 1p3/2 0.5 0.835

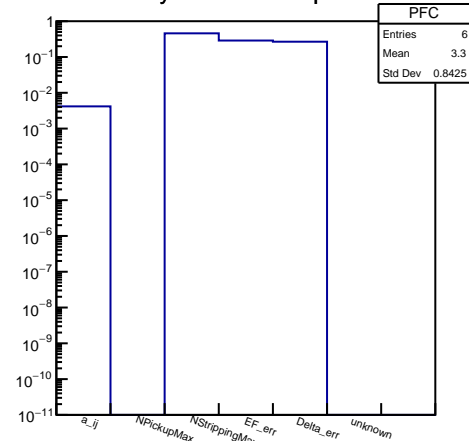
Oh77 norm. pickup



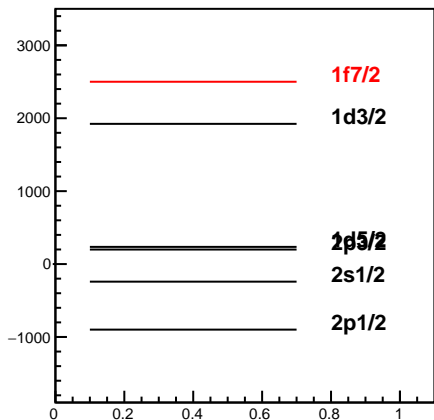
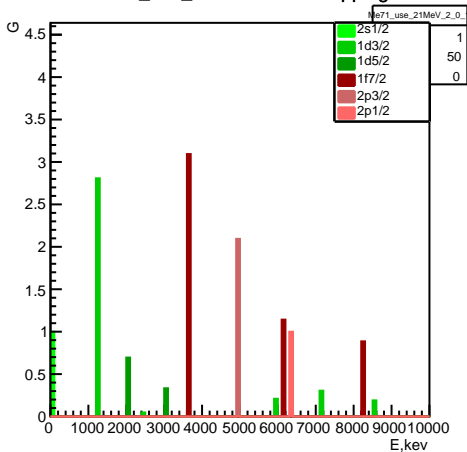
Occupancy\_norm



Penalty function components



Me71\_use\_21MeV norm. stripping



Experiment: Oh77 (9) Me71\_use\_21MeV (13)

neutron transfer\_norm

 $n^+ = 0.951713 \pm 0$   $n^- = 1.82005 \pm 0$ 

penalty: 0.251838

 $E_F: 165.543 \pm 406.104$  keV $\Delta: 2085.01 \pm 1104.83$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

235.611 1d5/2 0.709167 0.778333

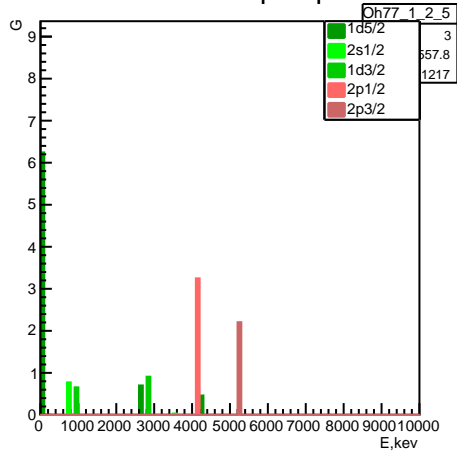
-241.276 2s1/2 0.33825 0.7265

1922.9 1d3/2 0.09625 1.0625

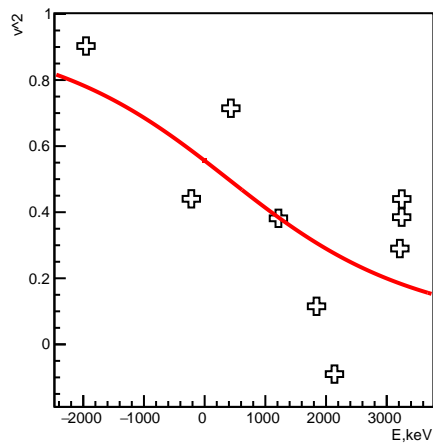
-899.136 2p1/2 0.8275 1.705

199.097 2p3/2 0.465 1.03

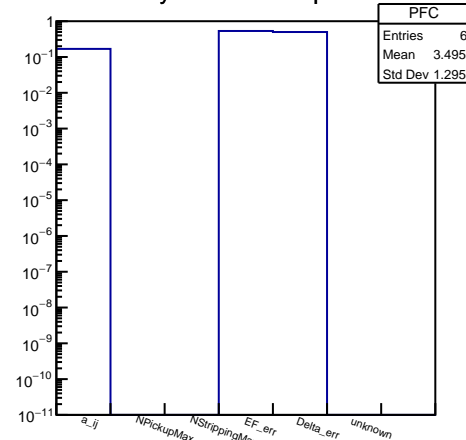
Oh77 norm. pickup



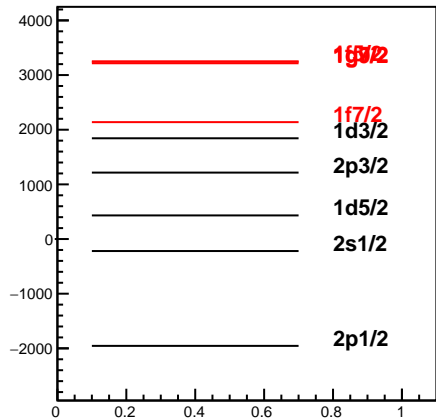
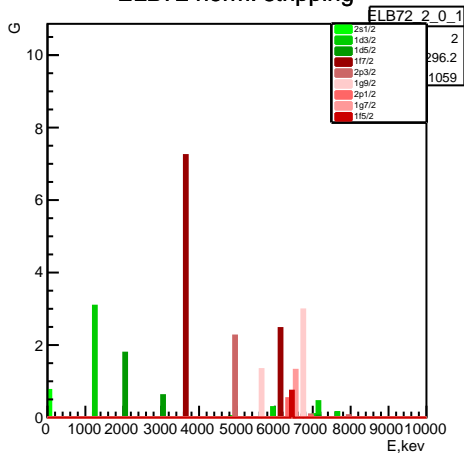
Occupancy\_norm



Penalty function components



ELB72 norm. stripping



Experiment: Oh77 (9) ELB72 (24)

neutron transfer\_norm

 $n^+ = 1.02866 \pm 0$   $n^- = 1.49027 \pm 0$ 

penalty: 0.256964

 $E_F: 390.766 \pm 751.002$  keV $\Delta: 3469.19 \pm 2060.49$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

432.047 1d5/2 0.714667 1.22733

-219.625 2s1/2 0.4405 0.661

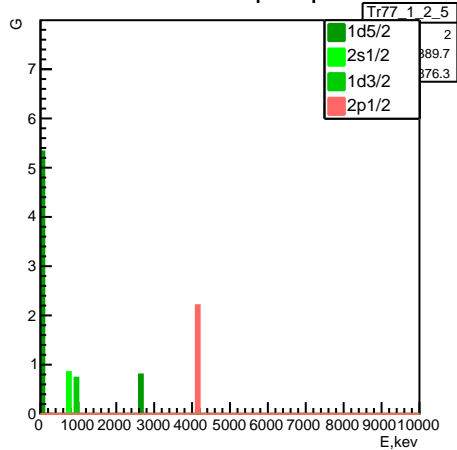
1843.22 1d3/2 0.11525 1.2945

-1954.73 2p1/2 0.903 1.374

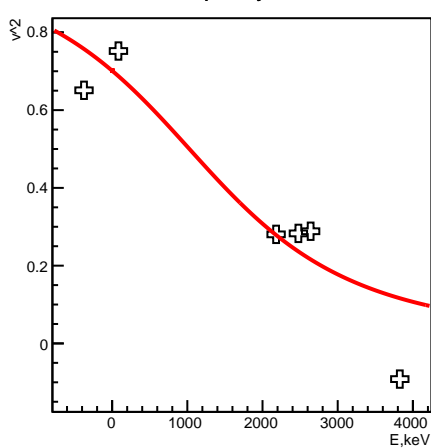
1215.45 2p3/2 0.3815 0.977



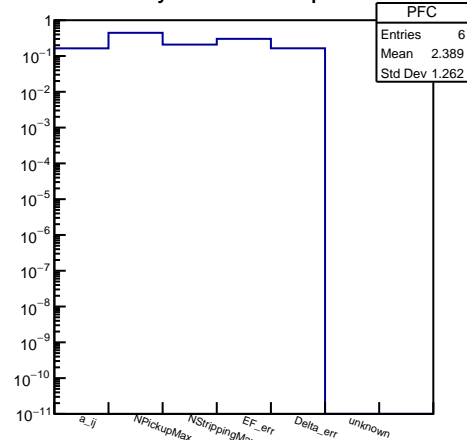
Tr77 norm. pickup



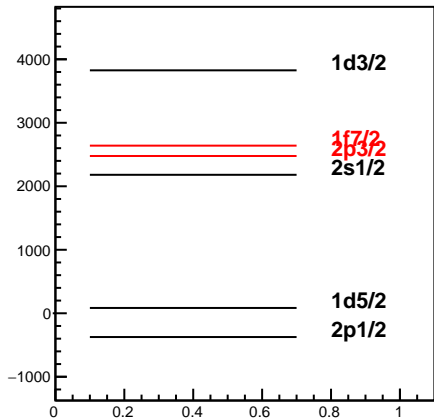
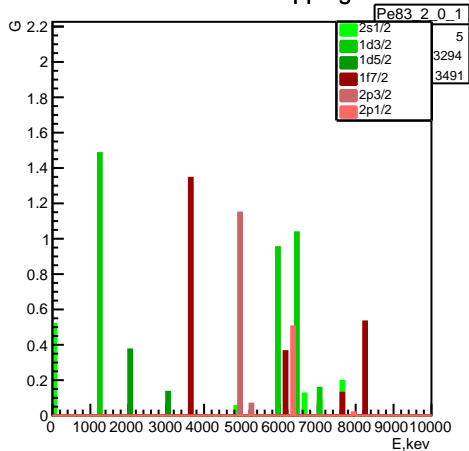
Occupancy\_norm



Penalty function components



Pe83 norm. stripping



Experiment: Tr77 (5) Pe83 (19)

neutron transfer\_norm

 $n^+ = 0.700264 \pm 0$   $n^- = 1.63495 \pm 0$ 

penalty: 0.264385

 $E_F: 1027.87 \pm 424.573$  keV $\Delta: -2336.5 \pm 677.578$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

83.7483 1d5/2 0.752 0.746

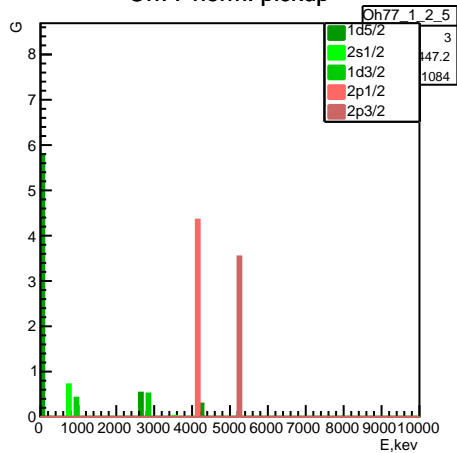
2180.7 2s1/2 0.2805 0.959

3825.89 1d3/2 -0.09175 1.4085

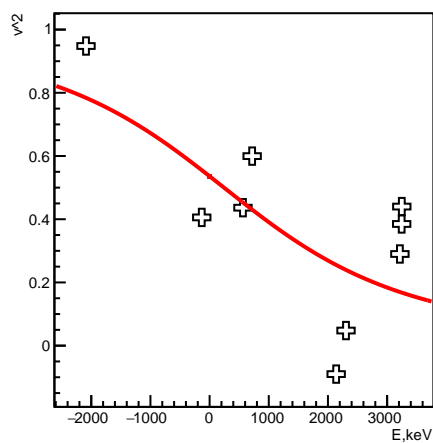
-374.225 2p1/2 0.651 1.048

2639.92 1f7/2 0.2885 0.423

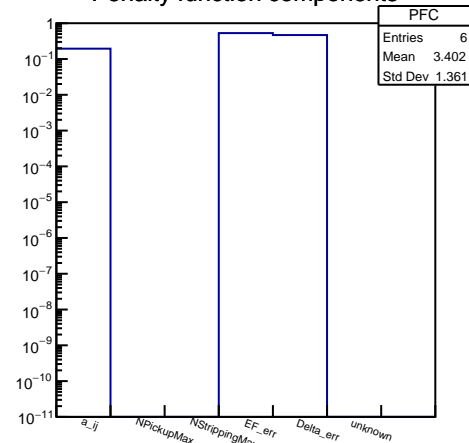
Oh77 norm. pickup



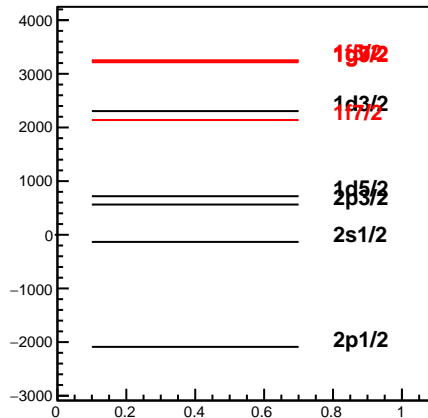
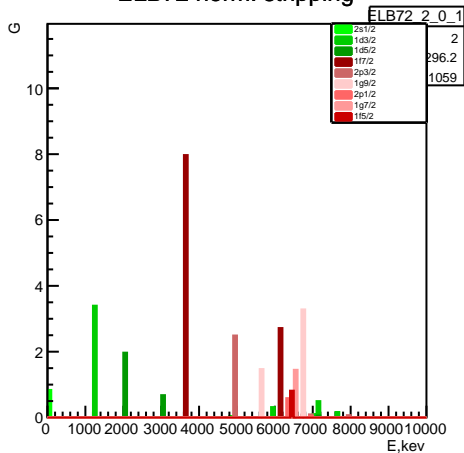
Occupancy\_norm



Penalty function components



ELB72 norm. stripping



Experiment: Oh77 (9) ELB72 (24)

neutron transfer\_norm

 $n^+ = 1.13248 \pm 0$   $n^- = 1.84494 \pm 0$ 

penalty: 0.265318

 $E_F: 242.91 \pm 745.485$  keV $\Delta: 3378.6 \pm 1926.49$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

718.841 1d5/2 0.599667 0.997333

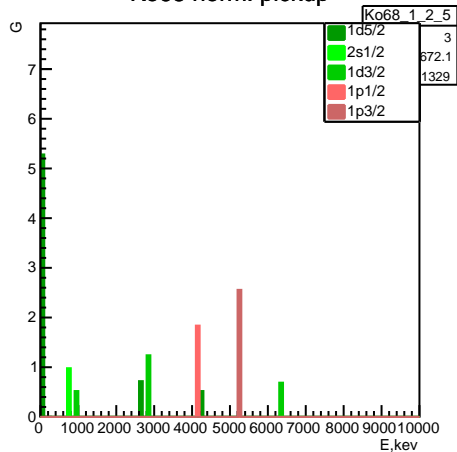
-132.684 2s1/2 0.40575 0.5915

2305.11 1d3/2 0.04775 1.1595

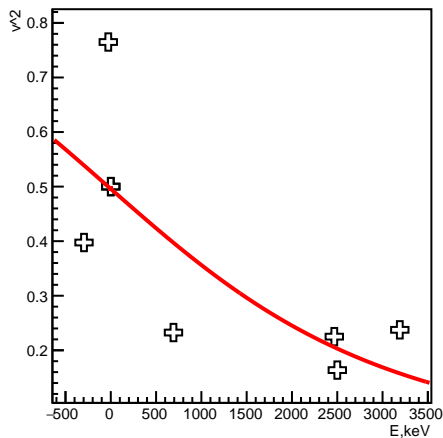
-2088.95 2p1/2 0.948 1.464

563.501 2p3/2 0.4365 1.087

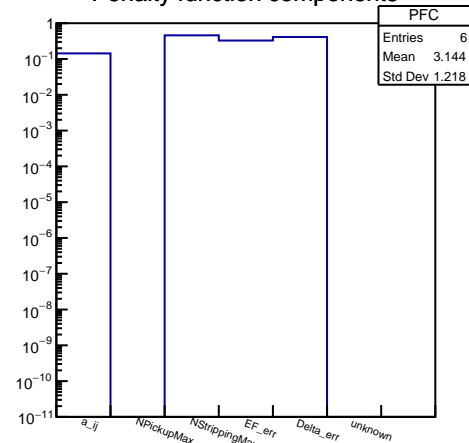
Ko68 norm. pickup



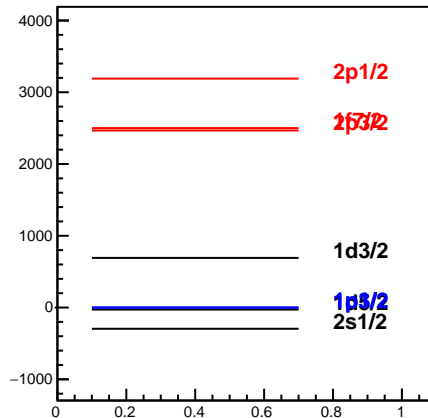
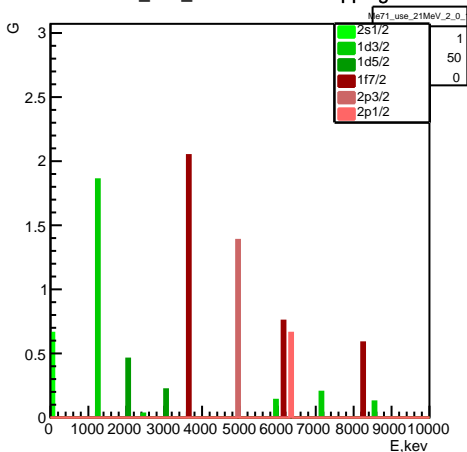
Occupancy\_norm



Penalty function components



Me71\_use\_21MeV norm. stripping



Experiment: Ko68 (9) Me71\_use\_21MeV (13)

neutron transfer\_norm

 $n^+ = 0.630055 \pm 0$   $n^- = 1.53108 \pm 0$ 

penalty: 0.285336

 $E_F: -28.3655 \pm 461.903$  keV $\Delta: 3425.67 \pm 1698.2$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-27.7752 1d5/2 0.765 0.89

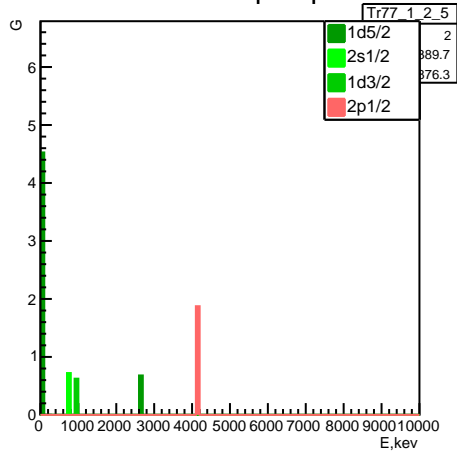
-295.725 2s1/2 0.3975 0.845

691.924 1d3/2 0.2325 1.335

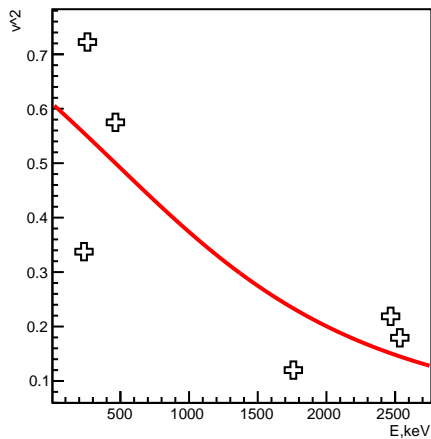
0 1p1/2 0.5 1.2

0 1p3/2 0.5 0.835

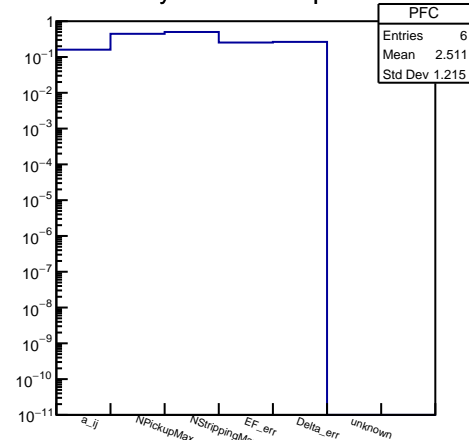
Tr77 norm. pickup



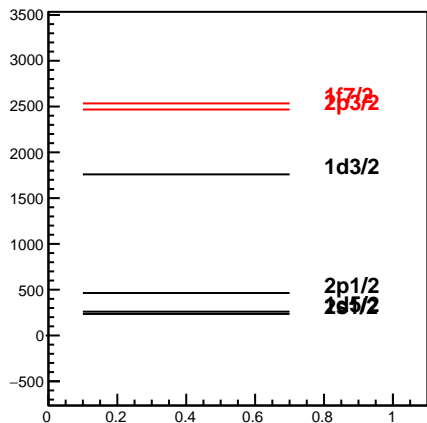
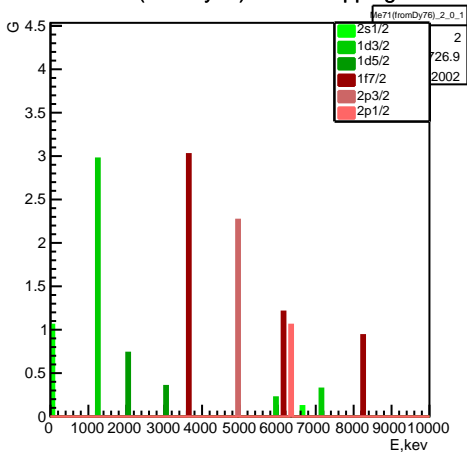
Occupancy\_norm



Penalty function components



Me71(fromDy76) norm. stripping



Experiment: Tr77 (5) Me71(fromDy76) (12)

neutron transfer\_norm

 $n^+ = 1.00777 \pm 0$   $n^- = 1.38854 \pm 0$ 

penalty: 0.335644

 $E_F: 463.821 \pm 357.119$  keV $\Delta: 2054.39 \pm 1091.28$  keVSPE, keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

260.26 1d5/2 0.7225 0.805

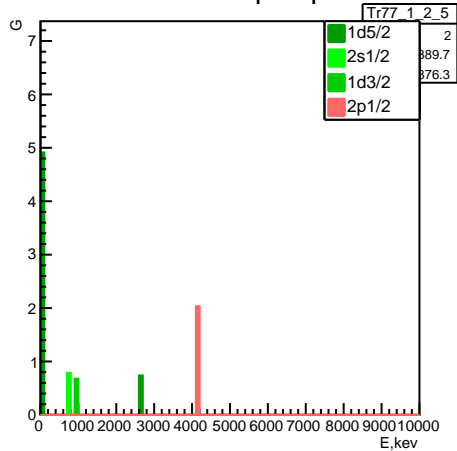
235.174 2s1/2 0.3375 0.845

1759.24 1d3/2 0.12 0.985

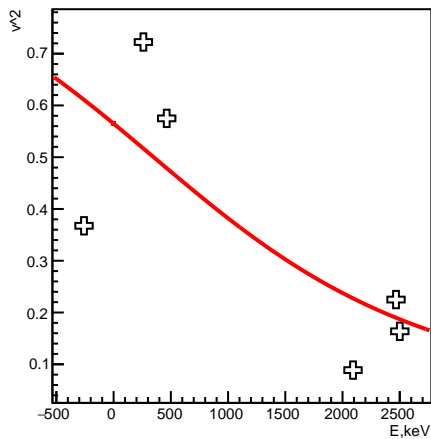
463.927 2p1/2 0.575 1.2

2534.09 1f7/2 0.179312 0.641375

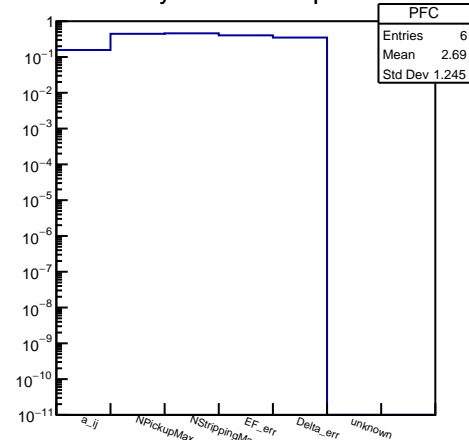
Tr77 norm. pickup



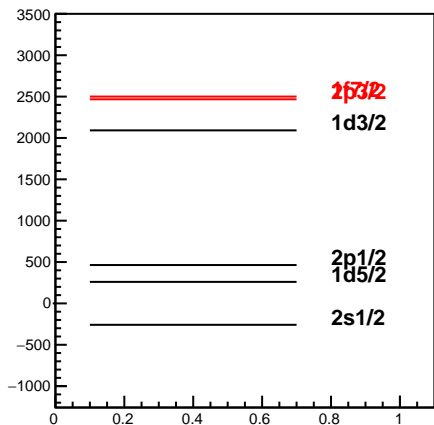
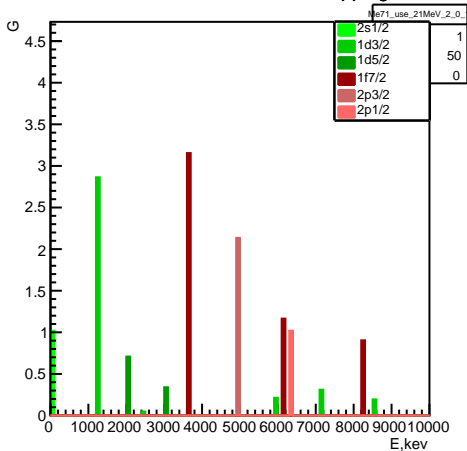
Occupancy\_norm



Penalty function components



Me71\_use\_21MeV norm. stripping



Experiment: Tr77 (5) Me71\_use\_21MeV (13)

neutron transfer\_norm

 $n^+ = 0.970613 \pm 0$   $n^- = 1.50722 \pm 0$ 

penalty: 0.398641

 $E_F: 350.28 \pm 567.027$  keV $\Delta: 2676.64 \pm 1442.36$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

260.26 1d5/2 0.7225 0.805

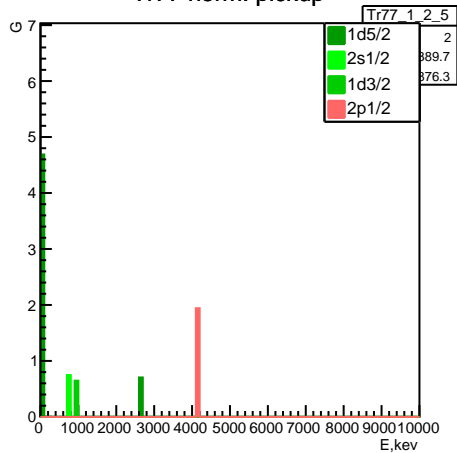
-258.642 2s1/2 0.3675 0.785

2091.71 1d3/2 0.08875 1.0475

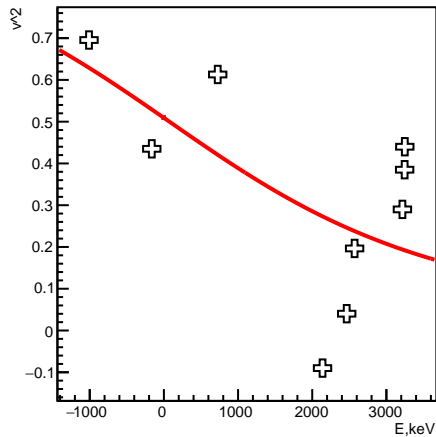
463.927 2p1/2 0.575 1.2

2500.39 1f7/2 0.163687 0.672625

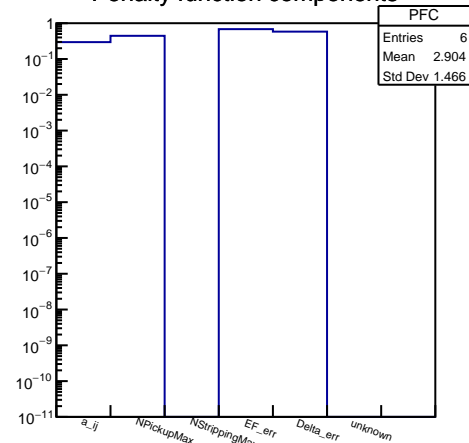
Tr77 norm. pickup



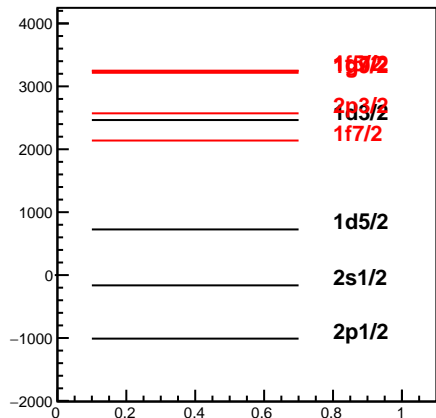
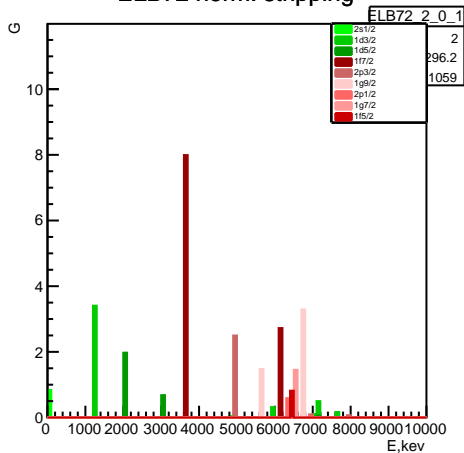
Occupancy\_norm



Penalty function components



ELB72 norm. stripping



Experiment: Tr77 (5) ELB72 (24)

neutron transfer\_norm

 $n^+ = 1.13541 \pm 0$   $n^- = 1.43829 \pm 0$ 

penalty: 0.413403

 $E_F: 73.7142 \pm 961.439$  keV $\Delta: 4058.23 \pm 2402.85$  keVSPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

725.634 1d5/2 0.613 1.024

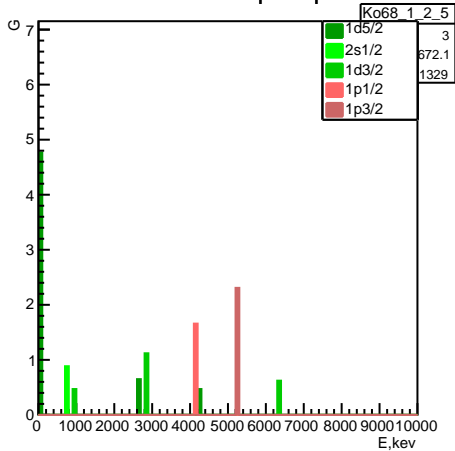
-163.431 2s1/2 0.435 0.65

2464.63 1d3/2 0.04025 1.1445

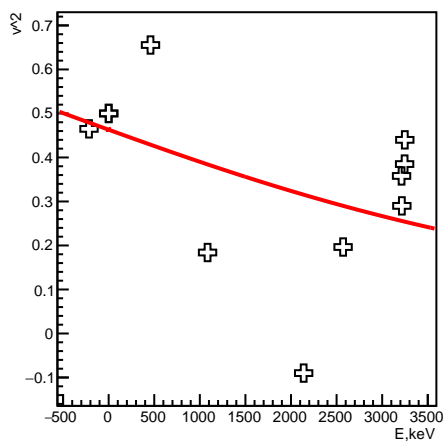
-1009.89 2p1/2 0.6955 0.959

2138.77 1f7/2 -0.09 1.18

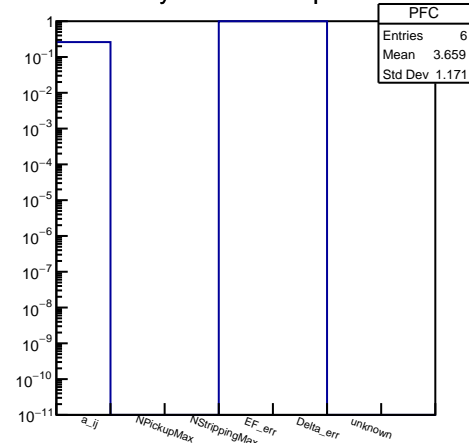
Ko68 norm. pickup



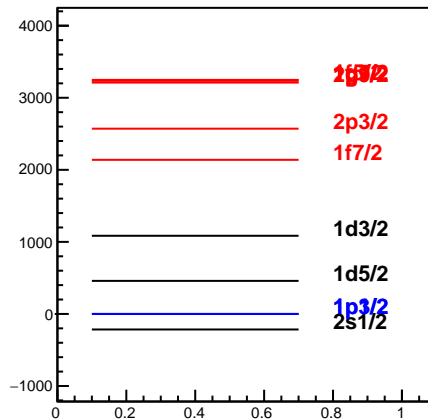
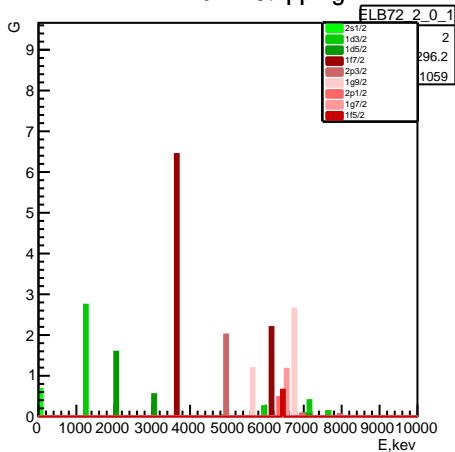
Occupancy\_norm



Penalty function components



ELB72 norm. stripping



Experiment: Ko68 (9) ELB72 (24)

neutron transfer\_norm

$$n^+ = 0.914906 \pm 0 \quad n^- = 1.38206 \pm 0$$

penalty: 0.486285

$$E_F: -490.712 \pm 1528.3 \text{ keV}$$

$$\Delta: 6617.47 \pm 4893.68 \text{ keV}$$

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

$$458.81 \text{ 1d5/2 } 0.6555 \text{ 1.109}$$

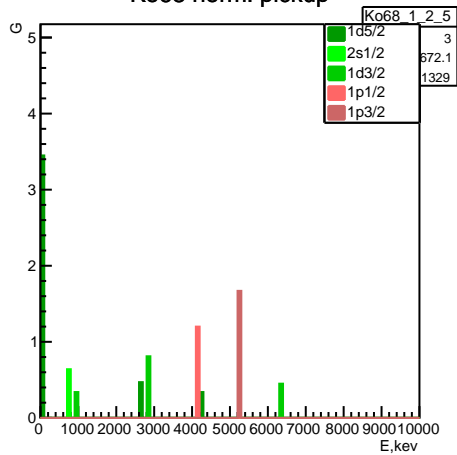
$$-215.611 \text{ 2s1/2 } 0.465 \text{ 0.71}$$

$$1084.79 \text{ 1d3/2 } 0.184 \text{ 1.432}$$

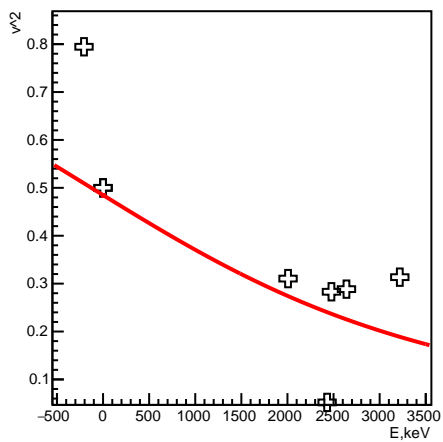
$$0 \text{ 1p1/2 } 0.5 \text{ 1.2}$$

$$0 \text{ 1p3/2 } 0.5 \text{ 0.835}$$

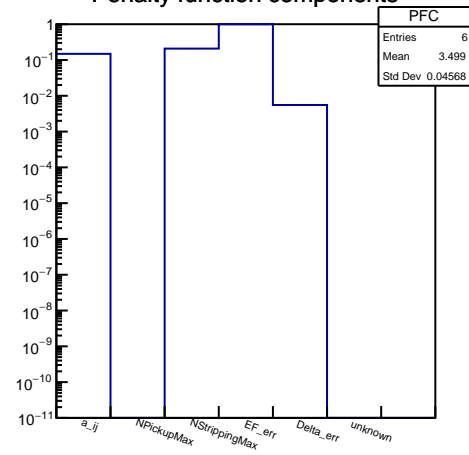
Ko68 norm. pickup



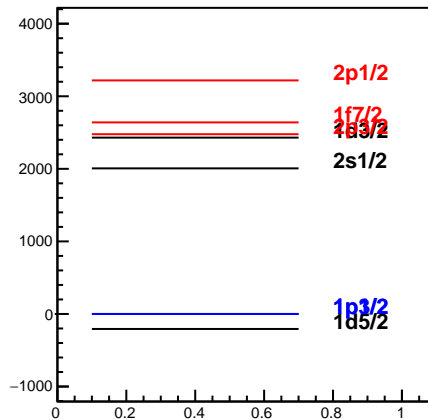
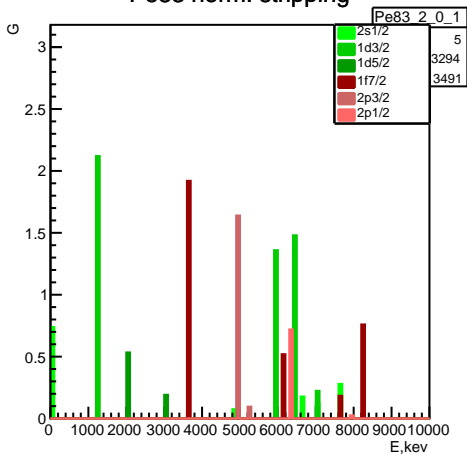
Occupancy\_norm



Penalty function components



Pe83 norm. stripping



Experiment: Ko68 (9) Pe83 (19)

penalty: 123.896

Normalization was not performed.