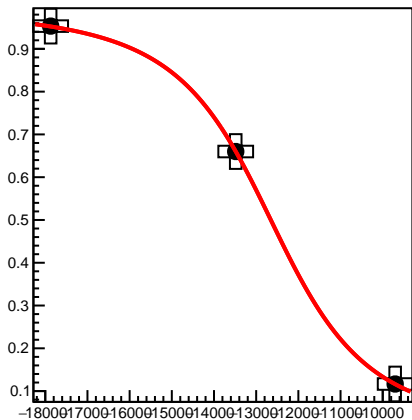
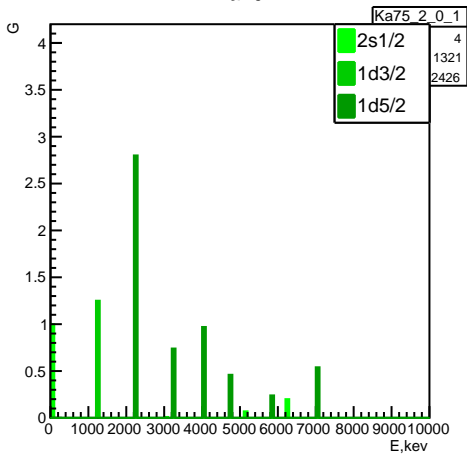
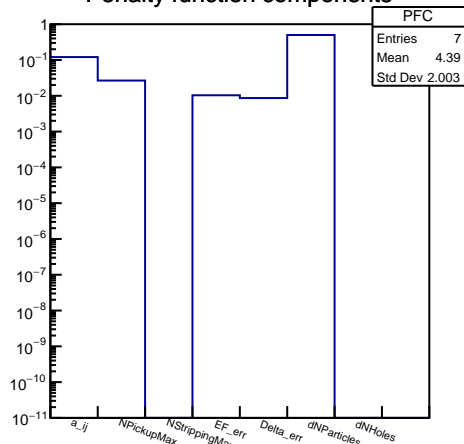


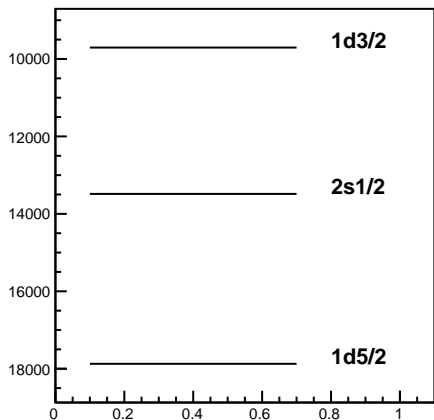
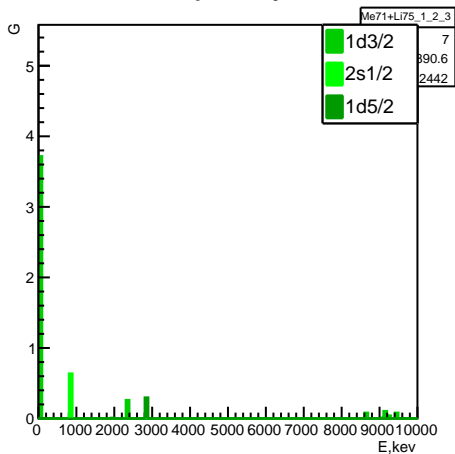
Ka75



Penalty function components



Me71+Li75



Experiment: Ka75 (11) Me71+Li75 (10)

neutron transfer

n separation energy A:15043.6, A+1: 8641.47

E\_F: -12652.6  $\pm$  6.05279 keV $\Delta$ : 2461.02  $\pm$  11.8101 keV

penalty: 0.128154

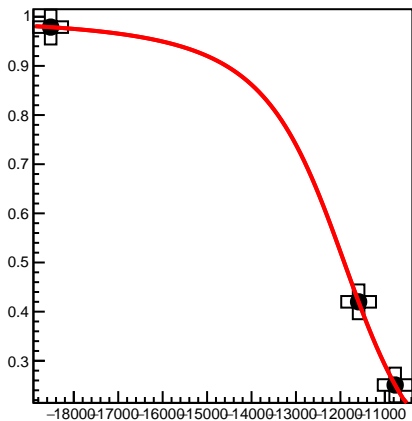
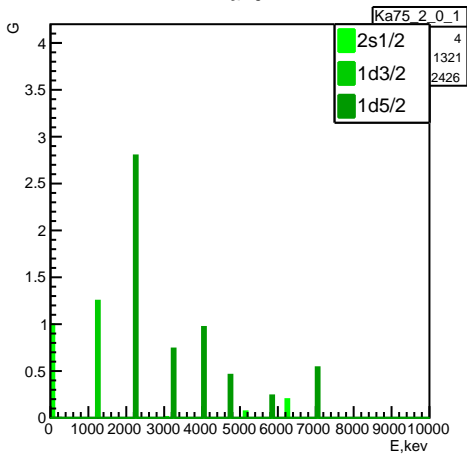
SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$ 

-13484.9 2s1/2 0.66 0.96

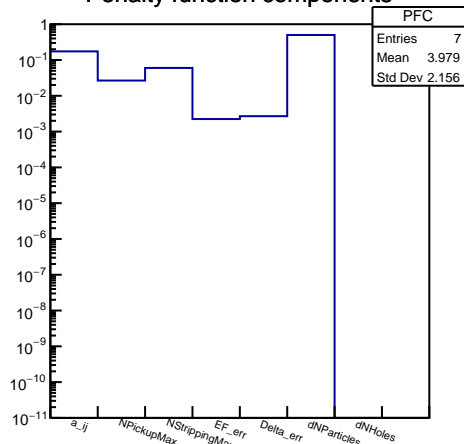
-9705.14 1d3/2 0.11655 1.3919

-17872.6 1d5/2 0.953167 1.01033

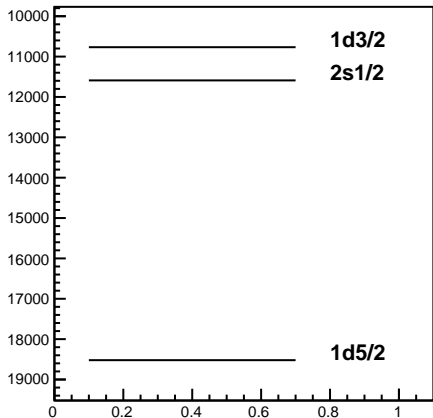
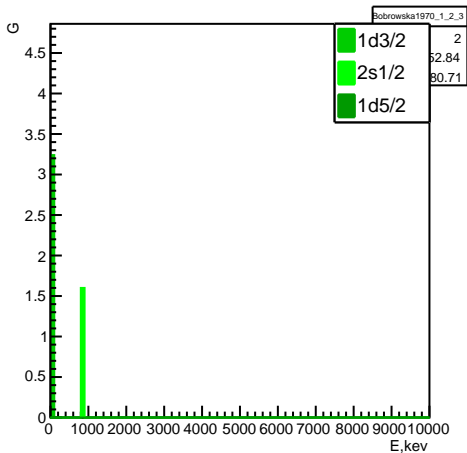
Ka75



Penalty function components



Bobrowska1970



**Experiment: Ka75 (11) Bobrowska1970 (4)**

**neutron transfer**

**n separation energy A:15043.6, A+1: 8641.47**

**E\_F: -11913  $\pm$  1.31085 keV**

**$\Delta$ : 1990.53  $\pm$  3.67942 keV**

**penalty: 0.147252**

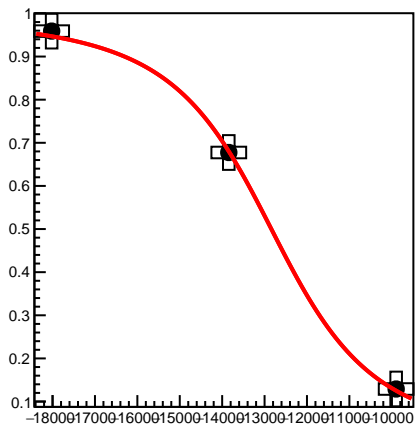
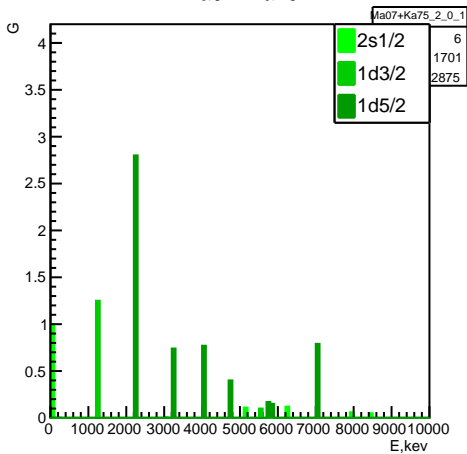
**SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$**

**-11590.1 2s1/2 0.42 1.44**

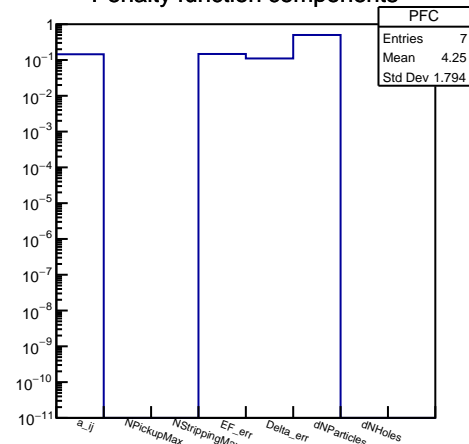
**-10767.5 1d3/2 0.25075 1.1235**

**-18521 1d5/2 0.978917 0.958833**

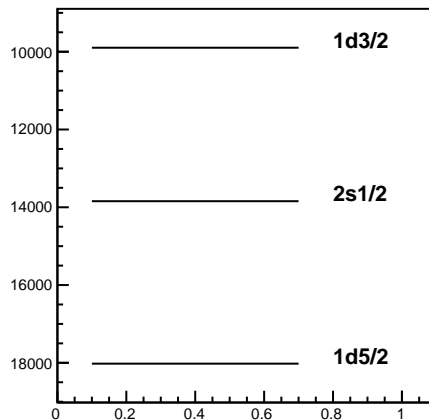
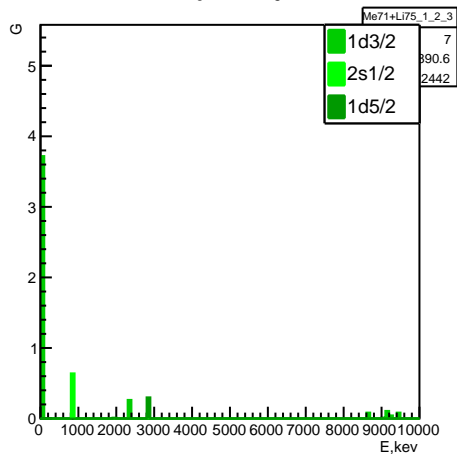
Ma07+Ka75



Penalty function components



Me71+Li75



**Experiment: Ma07+Ka75 (15) Me71+Li75 (10),  
neutron transfer**

**n separation energy A:15043.6, A+1: 8641.47**

**E\_F: -12840.1  $\pm$  86.2312 keV**

**$\Delta$ : -2597.46  $\pm$  150.826 keV**

**penalty: 0.173534**

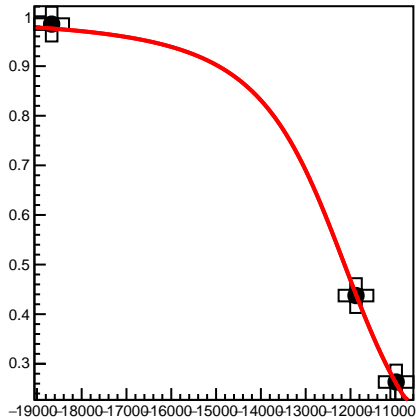
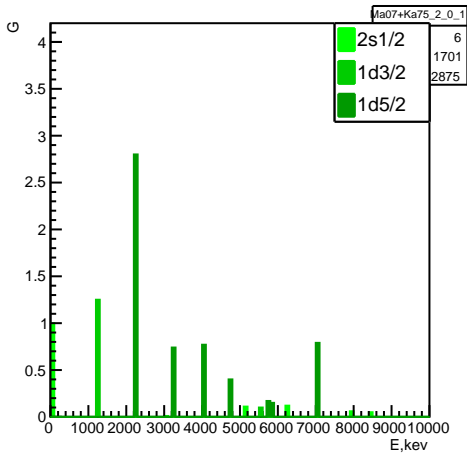
**SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$**

**-13843.9 2s1/2 0.6775 0.995**

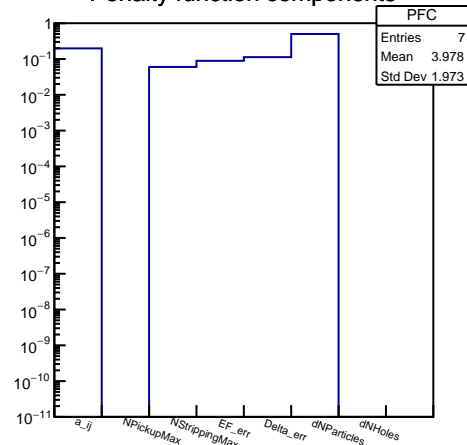
**-9896.69 1d3/2 0.12905 1.4169**

**-18021.5 1d5/2 0.959 1.022**

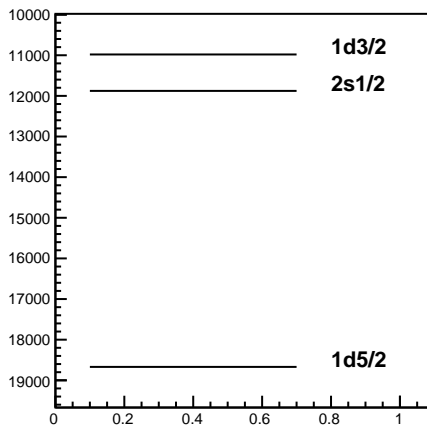
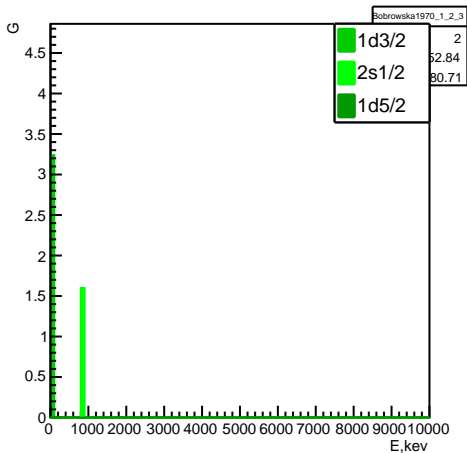
Ma07+Ka75



Penalty function components



Bobrowska1970



**Experiment: Ma07+Ka75 (15) Bobrowska197**  
**neutron transfer**

**n separation energy A:15043.6, A+1: 8641.47**

**E\_F: -12133.4 ± 52.0859 keV**

**Δ: 2110.54 ± 154.064 keV**

**penalty: 0.184573**

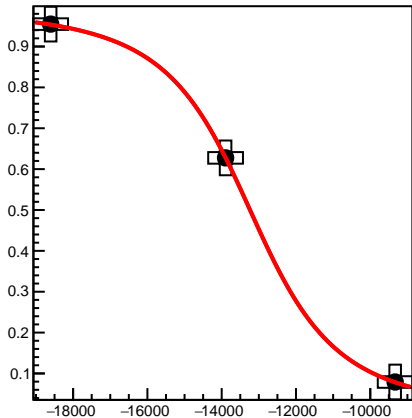
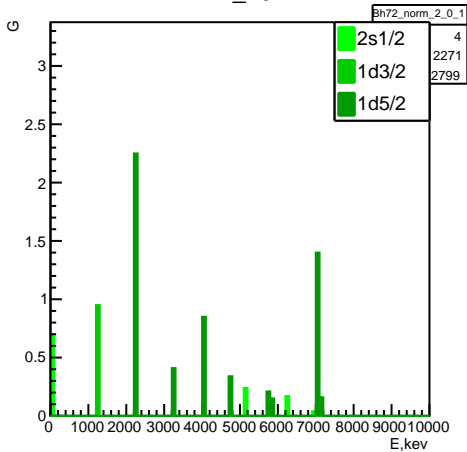
**SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$**

**-11877.2 2s1/2 0.4375 1.475**

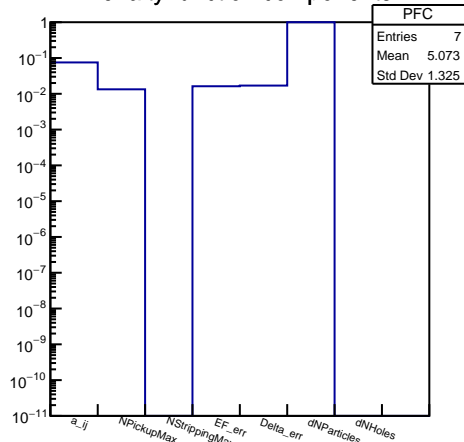
**-10980.7 1d3/2 0.26325 1.1485**

**-18670 1d5/2 0.98475 0.9705**

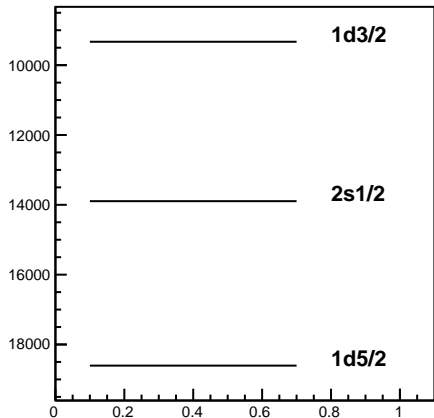
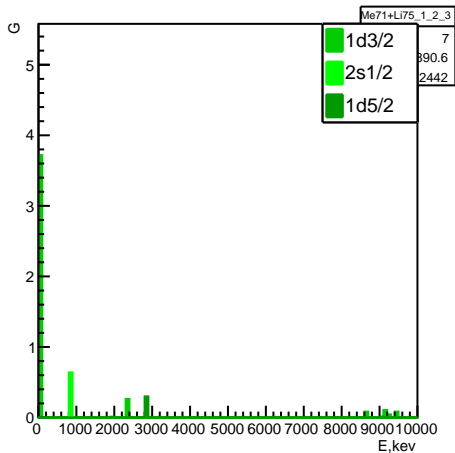
Bh72\_norm



Penalty function components



Me71+Li75



Experiment: Bh72\_norm (13) Me71+Li75 (10)  
neutron transfer

n separation energy A:15043.6, A+1: 8641.47

E\_F: -13237.1  $\pm$  9.51174 keV

$\Delta$ : -2491.33  $\pm$  23.1691 keV

penalty: 0.215718

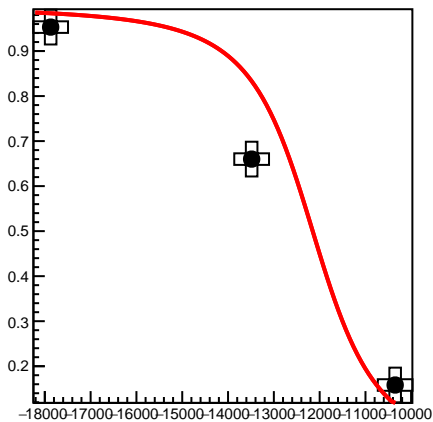
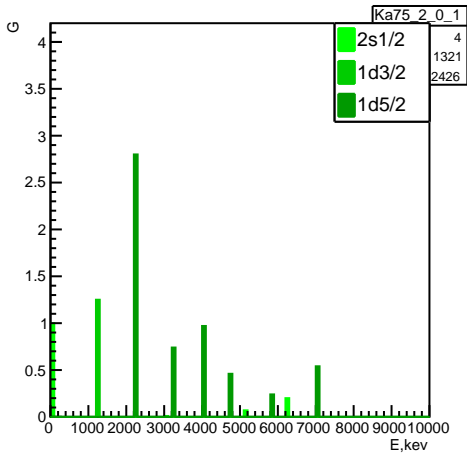
SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$

-13895.4 2s1/2 0.6275 0.895

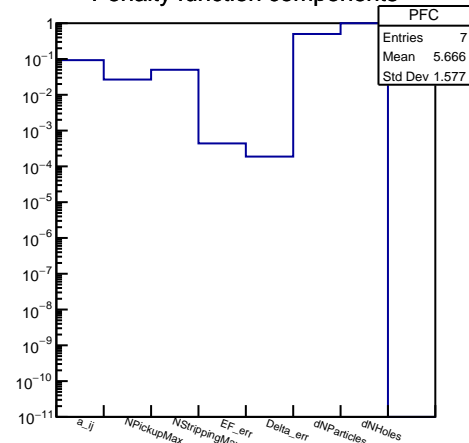
-9329.98 1d3/2 0.07905 1.3169

-18604.8 1d5/2 0.954833 1.01367

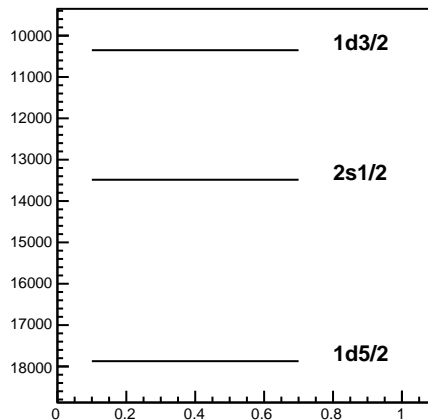
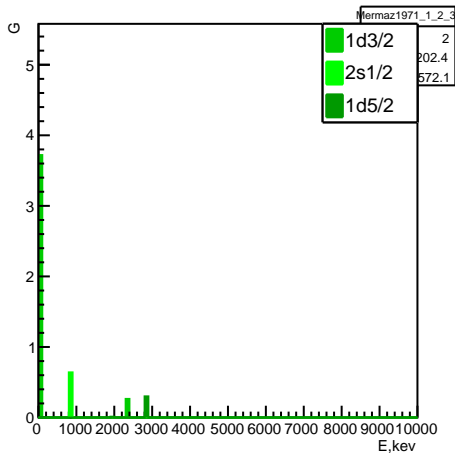
Ka75



Penalty function components



Mermaz1971



Experiment: Ka75 (11) Mermaz1971 (5)

neutron transfer

n separation energy A:15043.6, A+1: 8641.47

E\_F: -12152.3  $\pm$  0.256365 keV

$\Delta$ : -1490.12  $\pm$  0.256365 keV

penalty: 0.321199

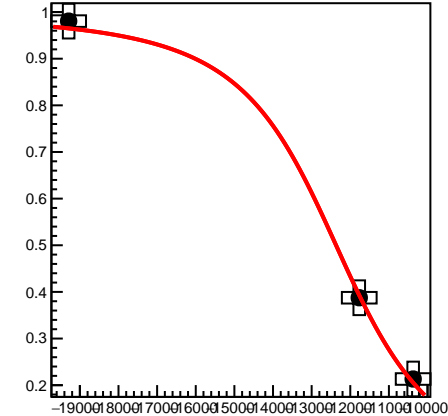
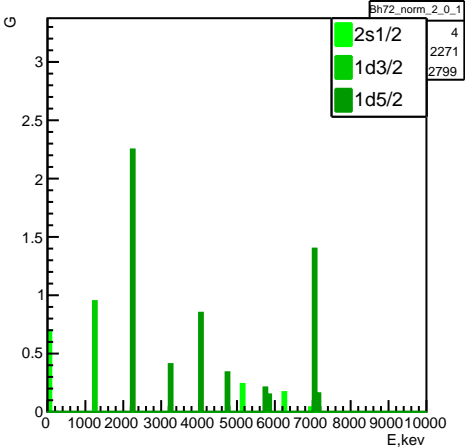
SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$

-13484.9 2s1/2 0.66 0.96

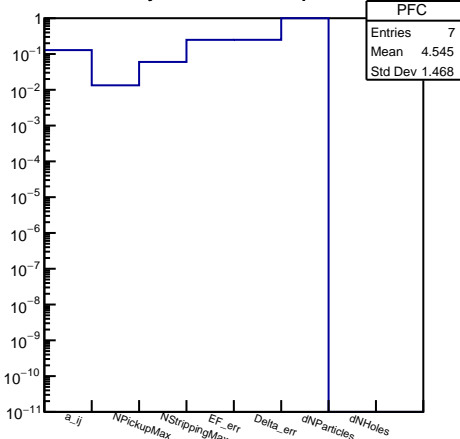
-10352 1d3/2 0.15825 1.3085

-17872.6 1d5/2 0.953167 1.01033

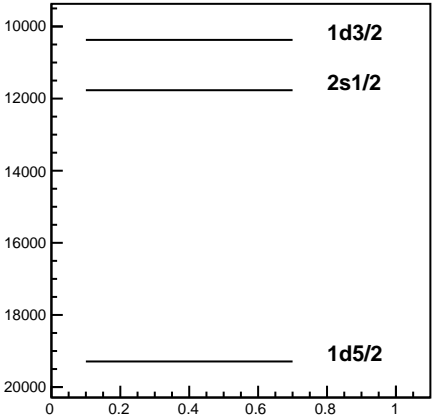
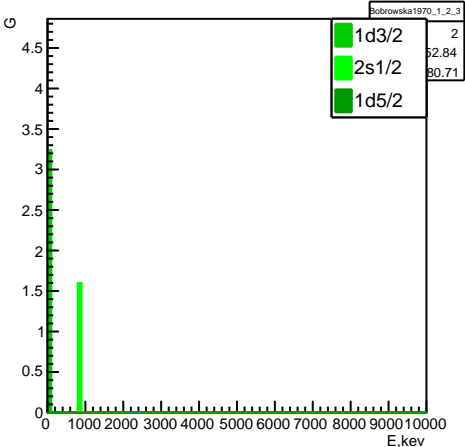
Bh72\_norm



Penalty function components



Bobrowska1970



Experiment: Bh72\_norm (13) Bobrowska197

neutron transfer

n separation energy A:15043.6, A+1: 8641.47

E\_F: -12367.9 ± 145.531 keV

Δ: 2735.6 ± 340.078 keV

penalty: 0.326827

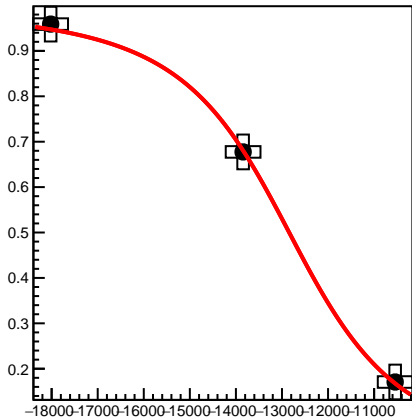
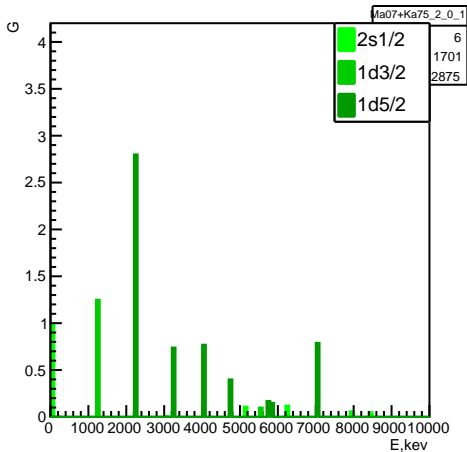
SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$

-11767.7 2s1/2 0.3875 1.375

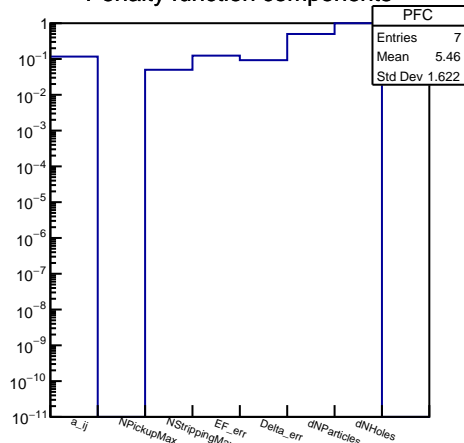
-10372.3 1d3/2 0.21325 1.0485

-19290.2 1d5/2 0.980583 0.962167

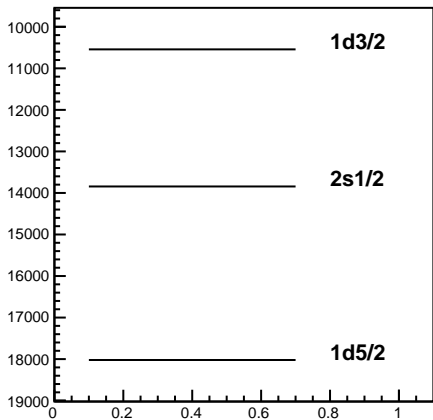
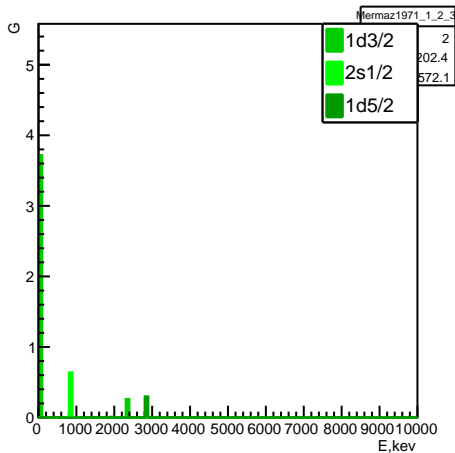
Ma07+Ka75



Penalty function components



Mermaz1971



**Experiment: Ma07+Ka75 (15) Mermaz1971 (5)**  
**neutron transfer**

**n separation energy A:15043.6, A+1: 8641.47**

**E\_F: -12843.6  $\pm$  72.7323 keV**

**$\Delta$ : -2584.28  $\pm$  126.76 keV**

**penalty: 0.362288**

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

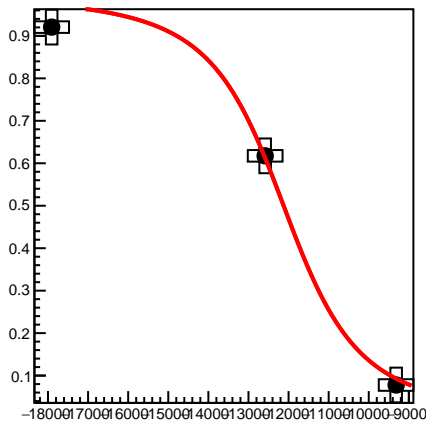
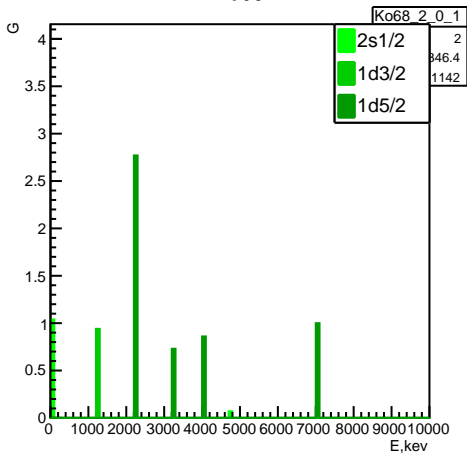
**-13843.9 2s1/2 0.6775 0.995**

**-10543.4 1d3/2 0.17075 1.3335**

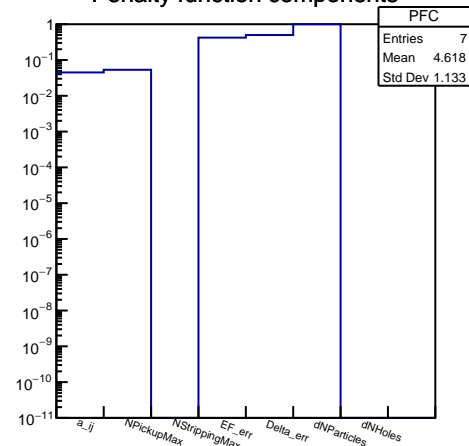
**-18021.5 1d5/2 0.959 1.022**



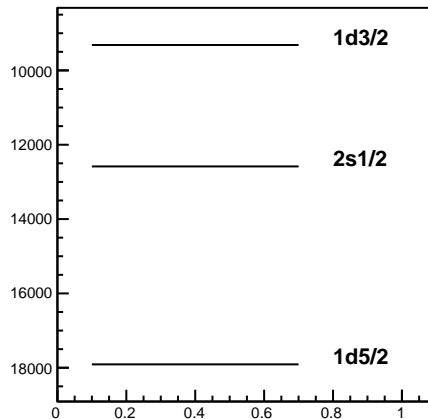
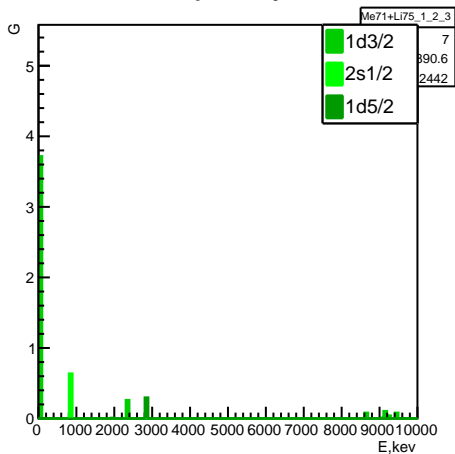
Ko68



Penalty function components



Me71+Li75



Experiment: Ko68 (7) Me71+Li75 (10)

neutron transfer

n separation energy A:15043.6, A+1: 8641.47

E\_F: -12123.5  $\pm$  246.953 keV

$\Delta$ : 1999.03  $\pm$  681.226 keV

penalty: 0.38825

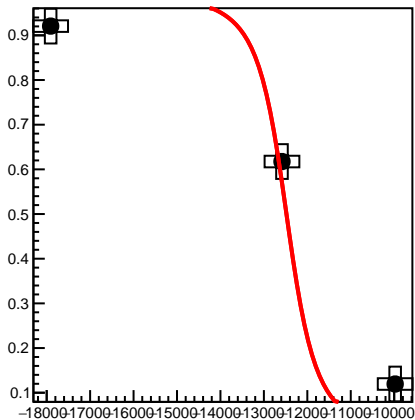
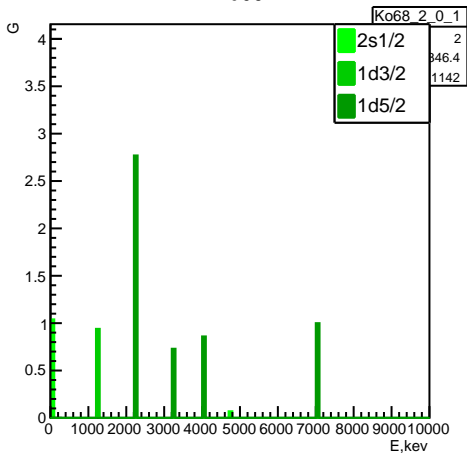
SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$

-12583.5 2s1/2 0.6175 0.875

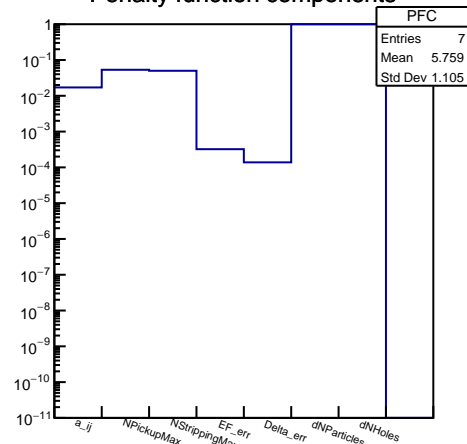
-9316.73 1d3/2 0.0778 1.3144

-17908.8 1d5/2 0.920667 0.945333

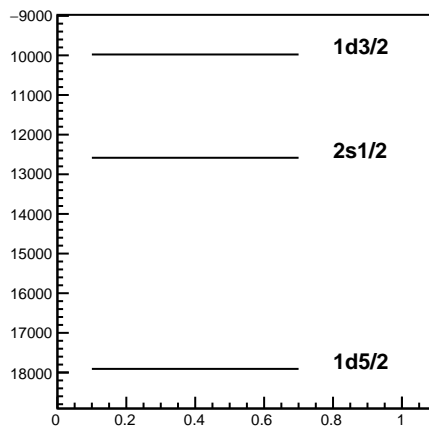
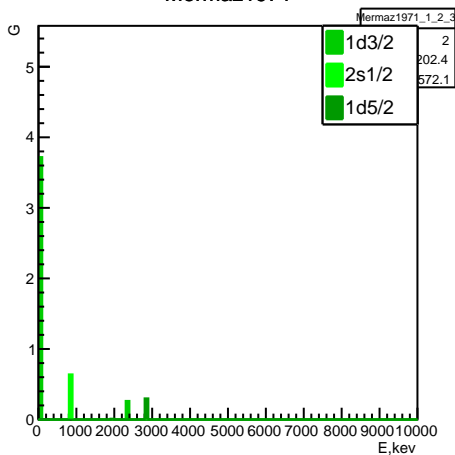
Ko68



Penalty function components



Mermaz1971



**Experiment: Ko68 (7) Mermaz1971 (5)**

**neutron transfer**

**n separation energy A:15043.6, A+1: 8641.47**

**E\_F: -12480.5  $\pm$  0.188624 keV**

**$\Delta$ : 724.705  $\pm$  0.188624 keV**

**penalty: 0.407866**

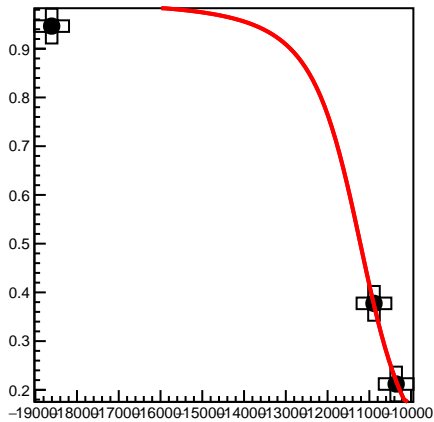
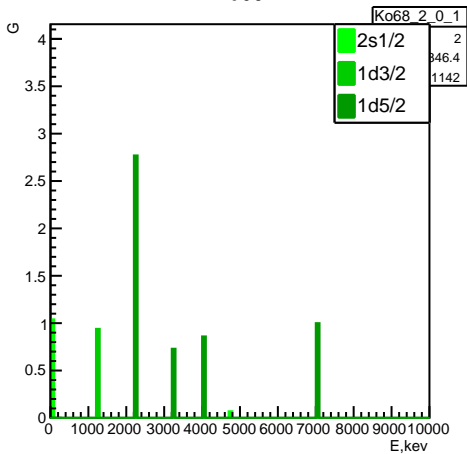
**SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$**

**-12583.5 2s1/2 0.6175 0.875**

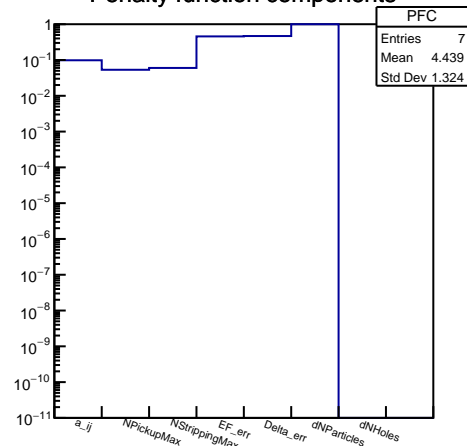
**-9978.03 1d3/2 0.1195 1.231**

**-17908.8 1d5/2 0.920667 0.945333**

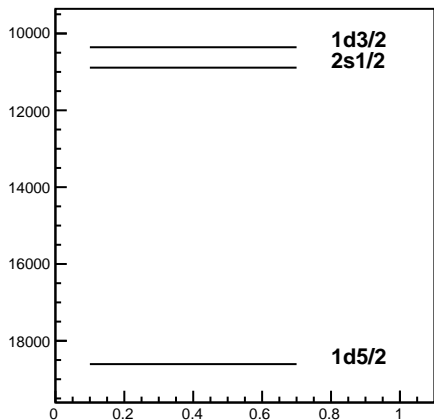
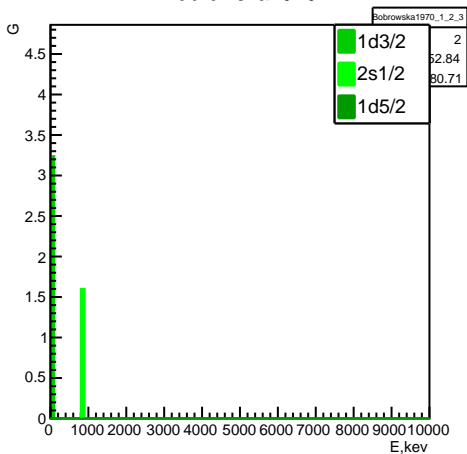
Ko68



Penalty function components



Bobrowska1970



Experiment: Ko68 (7) Bobrowska1970 (4)

neutron transfer

n separation energy A:15043.6, A+1: 8641.47

E\_F:  $-11215.8 \pm 267.133$  keV

$\Delta$ :  $1255.31 \pm 638.519$  keV

penalty: 0.410668

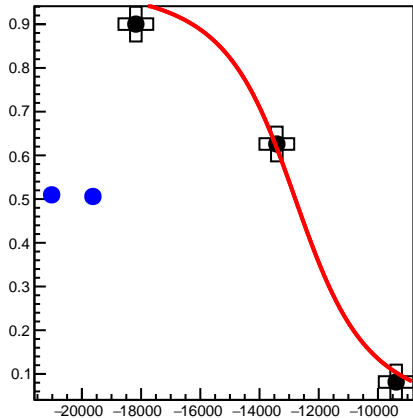
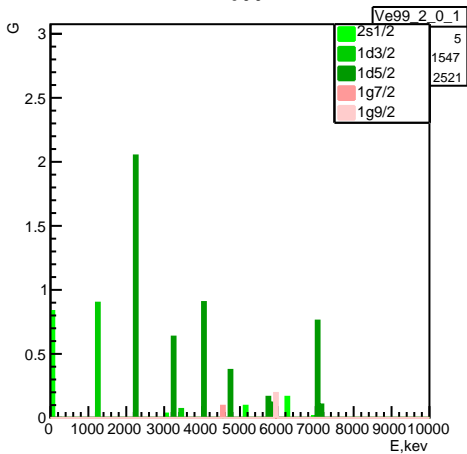
SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$

-10889.2 2s1/2 0.3775 1.355

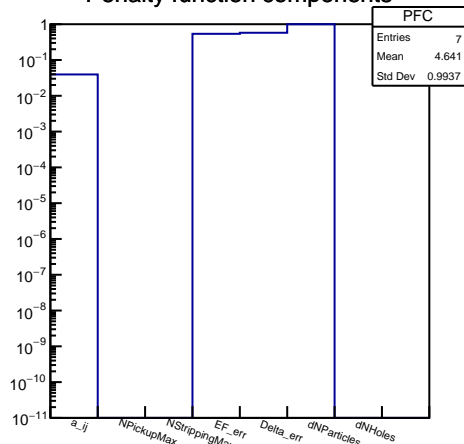
-10358.2 1d3/2 0.212 1.046

-18606.5 1d5/2 0.946417 0.893833

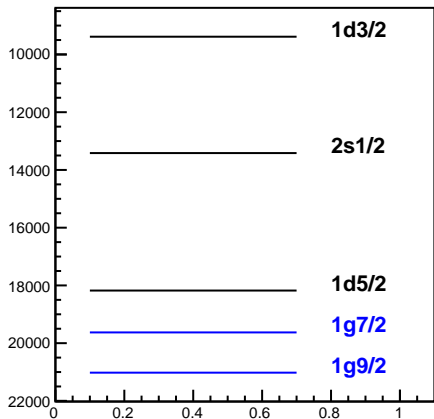
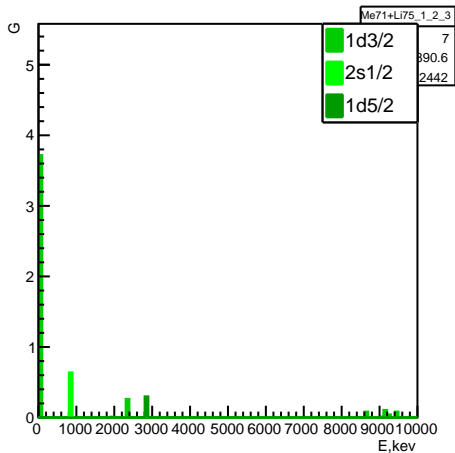
Ve99



Penalty function components



Me71+Li75



Experiment: Ve99 (17) Me71+Li75 (10)

neutron transfer

n separation energy A:15043.6, A+1: 8641.47

 $E_F: -12790.5 \pm 315.507 \text{ keV}$  $\Delta: 2611.71 \pm 787.59 \text{ keV}$ 

penalty: 0.414445

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

-13415.7 2s1/2 0.626 0.892

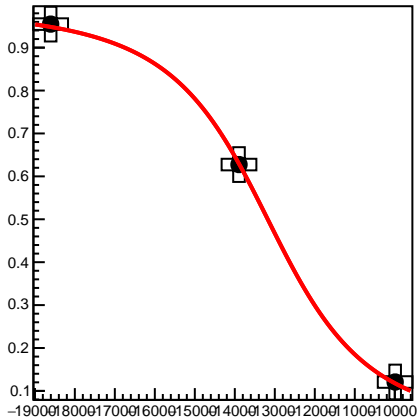
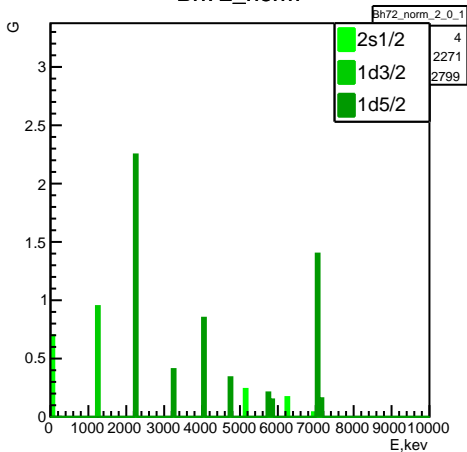
-9385.26 1d3/2 0.08155 1.3219

-18177.4 1d5/2 0.90025 0.9045

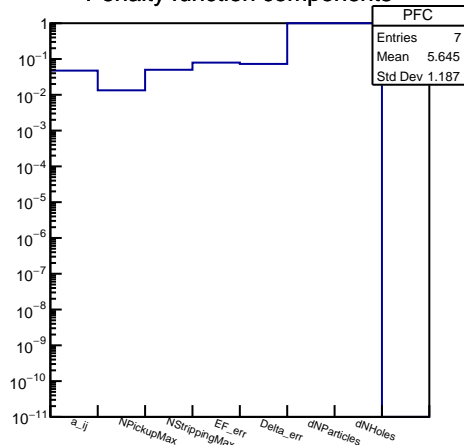
-19627.6 1g7/2 0.505937 3.21143e-322

-21021.5 1g9/2 0.50975 0.0394667

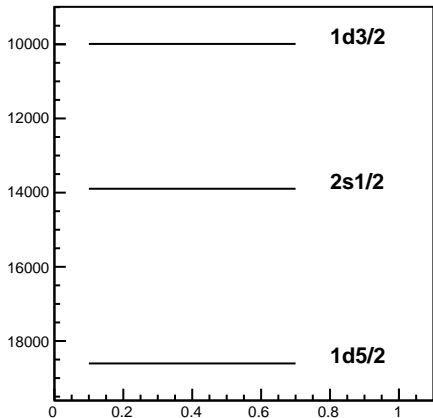
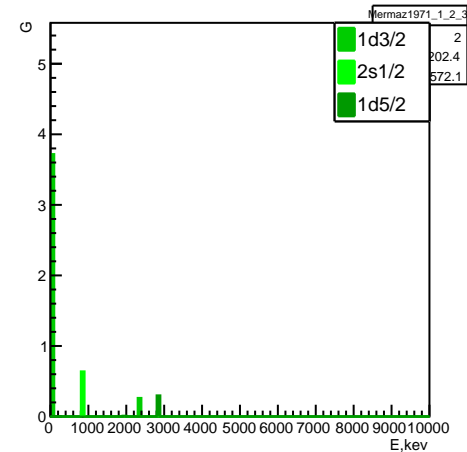
Bh72\_norm



Penalty function components



Mermaz1971



Experiment: Bh72\_norm (13) Mermaz1971 (5)  
neutron transfer

n separation energy A:15043.6, A+1: 8641.47

E\_F: -13176.7  $\pm$  46.3957 keV

$\Delta$ : 2683.13  $\pm$  99.4873 keV

penalty: 0.435159

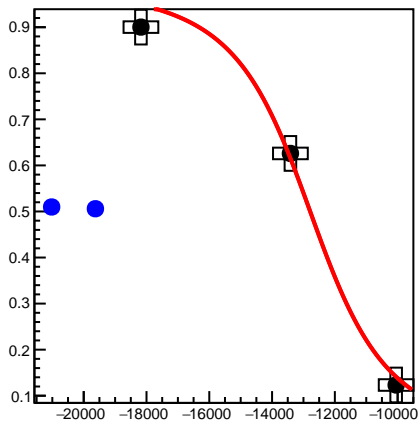
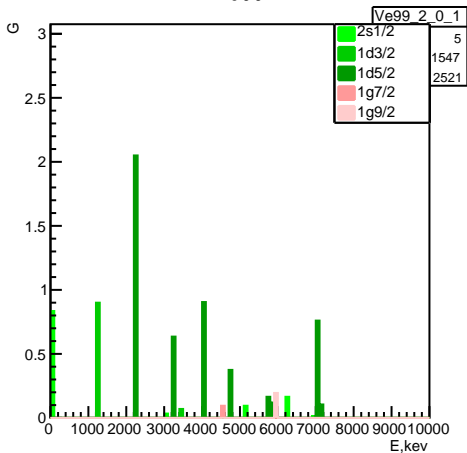
SPE,keV nlj OCC  $\frac{G^+ + G^-}{2J+1}$

-13895.4 2s1/2 0.6275 0.895

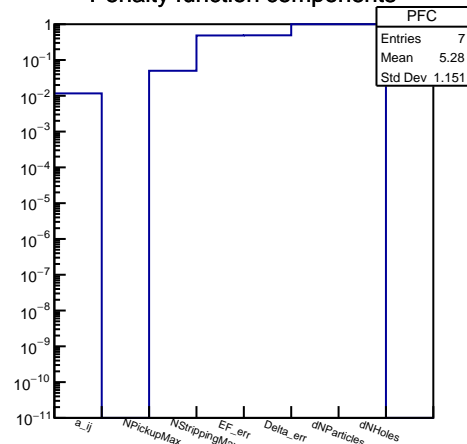
-9990.83 1d3/2 0.12075 1.2335

-18604.8 1d5/2 0.954833 1.01367

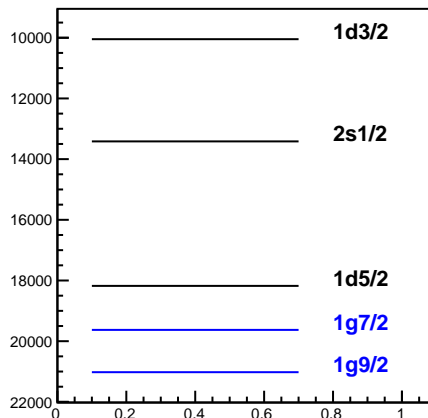
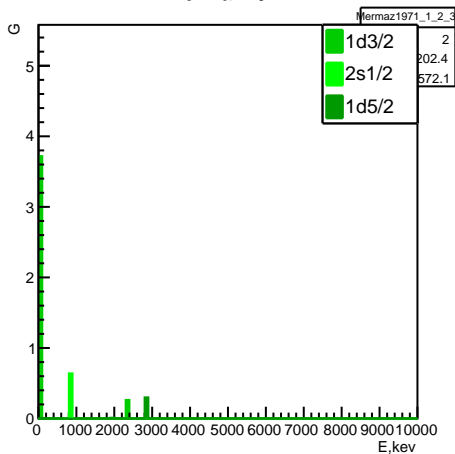
Ve99



Penalty function components



Mermaz1971



Experiment: Ve99 (17) Mermaz1971 (5)

neutron transfer

n separation energy A:15043.6, A+1: 8641.47

 $E_F: -12786.2 \pm 283.625 \text{ keV}$  $\Delta: 2654.97 \pm 668.901 \text{ keV}$ 

penalty: 0.583836

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

-13415.7 2s1/2 0.626 0.892

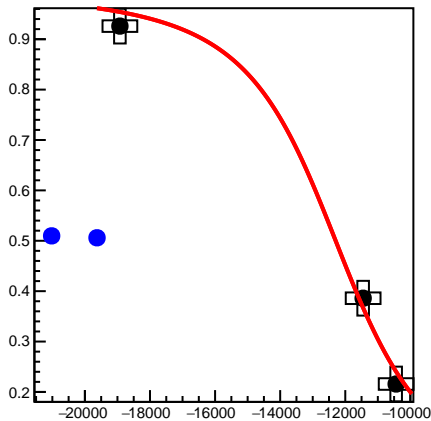
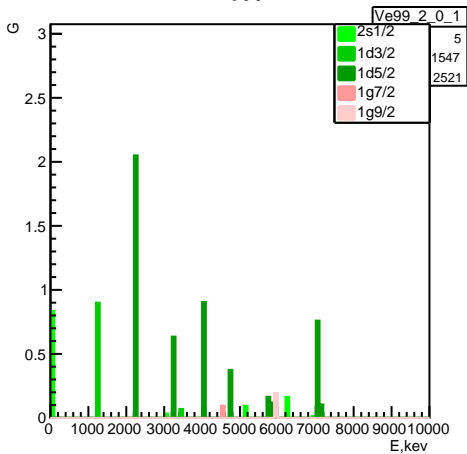
-10047.2 1d3/2 0.12325 1.2385

-18177.4 1d5/2 0.90025 0.9045

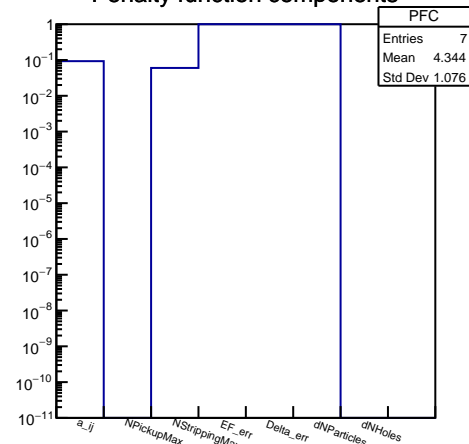
-19627.6 1g7/2 0.505937 3.21143e-322

-21021.5 1g9/2 0.50975 0.0116667

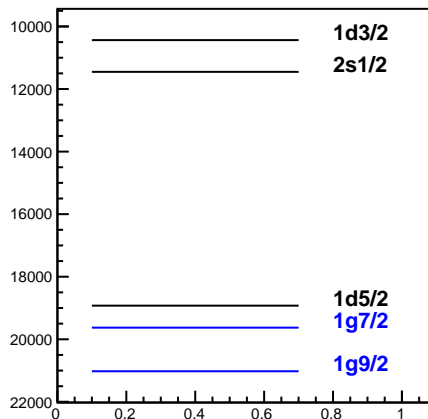
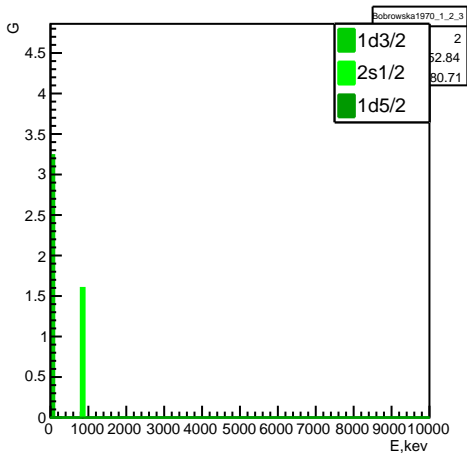
Ve99



Penalty function components



Bobrowska1970



Experiment: Ve99 (17) Bobrowska1970 (4)  
 neutron transfer  
 n separation energy A:15043.6, A+1: 8641.47  
 $E_F: -12295.8 \pm 585.333 \text{ keV}$   
 $\Delta: 3055.13 \pm 1365.86 \text{ keV}$   
 penalty: 0.606314  
 $\text{SPE, keV nlj OCC } \frac{G^+ + G^-}{2J+1}$   
 -11451.2 2s1/2 0.386 1.372  
 -10436.8 1d3/2 0.21575 1.0535  
 -18924.7 1d5/2 0.926 0.853  
 -19627.6 1g7/2 0.505937 3.21143e-322  
 -21021.5 1g9/2 0.50975 0.0928333