

# Mugast DSSD Energy Calibration Report

## 1 Calibration Summary

**Experiment :** MUGAST<sub>LISE23</sub>LaurieandHugo

**Operator App. Date :** 24/05/23

**Source :** 3 alpha peaks <sup>239</sup>Pu, <sup>241</sup>Am, <sup>244</sup>Cm

**Dead Layer :** Al 0.3 $\mu$ m + Si 0 $\mu$ m

**Comment :** Mugast

**Calibration Method :** ZeroExtrapolation

**Telescope Treated :** 4

**Strip Treated :** 1 to 128

**DSSD Side :** X

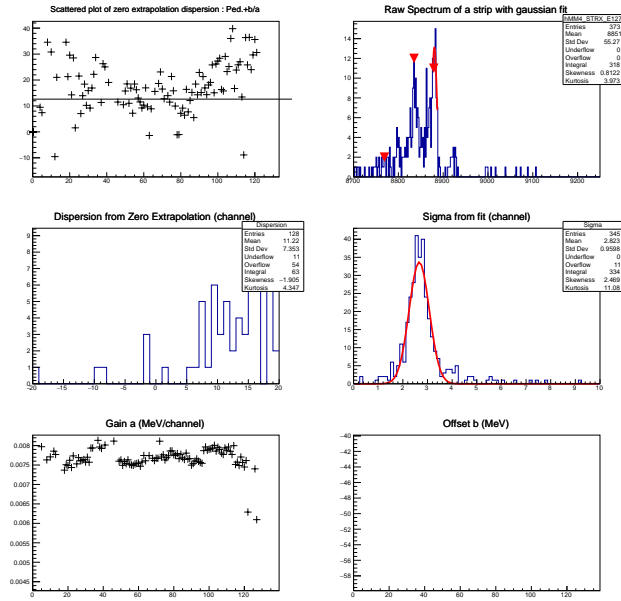
### Source Description :

Isotope	Original Energy (MeV)	Branching Ratio
<sup>239</sup> Pu	5.15659	70.77
<sup>239</sup> Pu	5.14438	17.11
<sup>239</sup> Pu	5.1055	11.94
<sup>241</sup> Am	5.48556	84.8
<sup>241</sup> Am	5.4428	13.1
<sup>241</sup> Am	5.388	1.66
<sup>244</sup> Cm	5.80477	76.4
<sup>244</sup> Cm	5.76264	23.6

## 2 Telescope 4

Bad Strip :

Strip Number	Problem
1	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
2	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
3	zero extrapolation too high :312.575channels ;
6	zero extrapolation too high :666.2channels ;
7	zero extrapolation too high :-142.703channels ;
8	zero extrapolation too high :34.5742channels ;
9	zero extrapolation too high :-205channels ;
10	zero extrapolation too high :30.8008channels ;
11	zero extrapolation too high :-6216.81channels ;
14	zero extrapolation too high :-143.73channels ;
15	zero extrapolation too high :-200.906channels ;
16	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
17	zero extrapolation too high :-144.789channels ;
18	zero extrapolation too high :34.5744channels ;
24	zero extrapolation too high :-61.2912channels ;
35	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
36	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
40	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
42	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
43	zero extrapolation too high :-35.9512channels ;
44	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
45	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
48	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
65	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
67	0 peak(s) found ; zero extrapolation too high :8203.4channels ;
107	zero extrapolation too high :36.0075channels ;
108	zero extrapolation too high :39.8008channels ;
115	zero extrapolation too high :36.3622channels ;
117	zero extrapolation too high :36.4443channels ;
120	zero extrapolation too high :35.6164channels ;
121	zero extrapolation too high :30.5995channels ;
122	zero extrapolation too high :225.941channels ;
123	zero extrapolation too high :-205.696channels ;
124	2 peak(s) found ; zero extrapolation too high :8203.4channels ;
125	zero extrapolation too high :-189.325channels ;
126	zero extrapolation too high :44.1528channels ;
127	zero extrapolation too high :256.829channels ;
128	zero extrapolation too high :650.162channels ;



Sigma fit centroid : 2.66427  
 Sigma fit sigma : 0.409995