

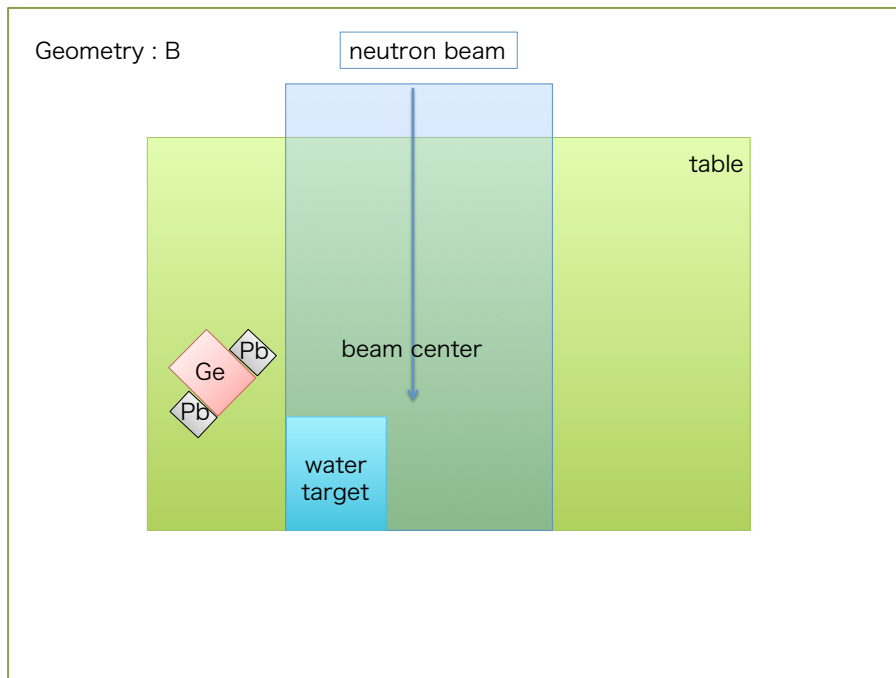
update

- E493 parasite
- attempt ncgamma with Fukuda-san
- E465 HPGe TN

Corina Nantais
Group Meeting
22 February 2017

E493 parasite experiment at RCNP

- similar to E465 experiment
- 300 MeV (instead of 80 MeV) neutrino kinetic energy
- much farther away from Li target (instead of ~ 10 m)
- Akira, Koshio-san, Nagata-san, Ashida-san, Roger, and others
- HPGe and LaBr₃
- sent histograms of 10 runs (one of which is ⁶⁰Co calibration data)



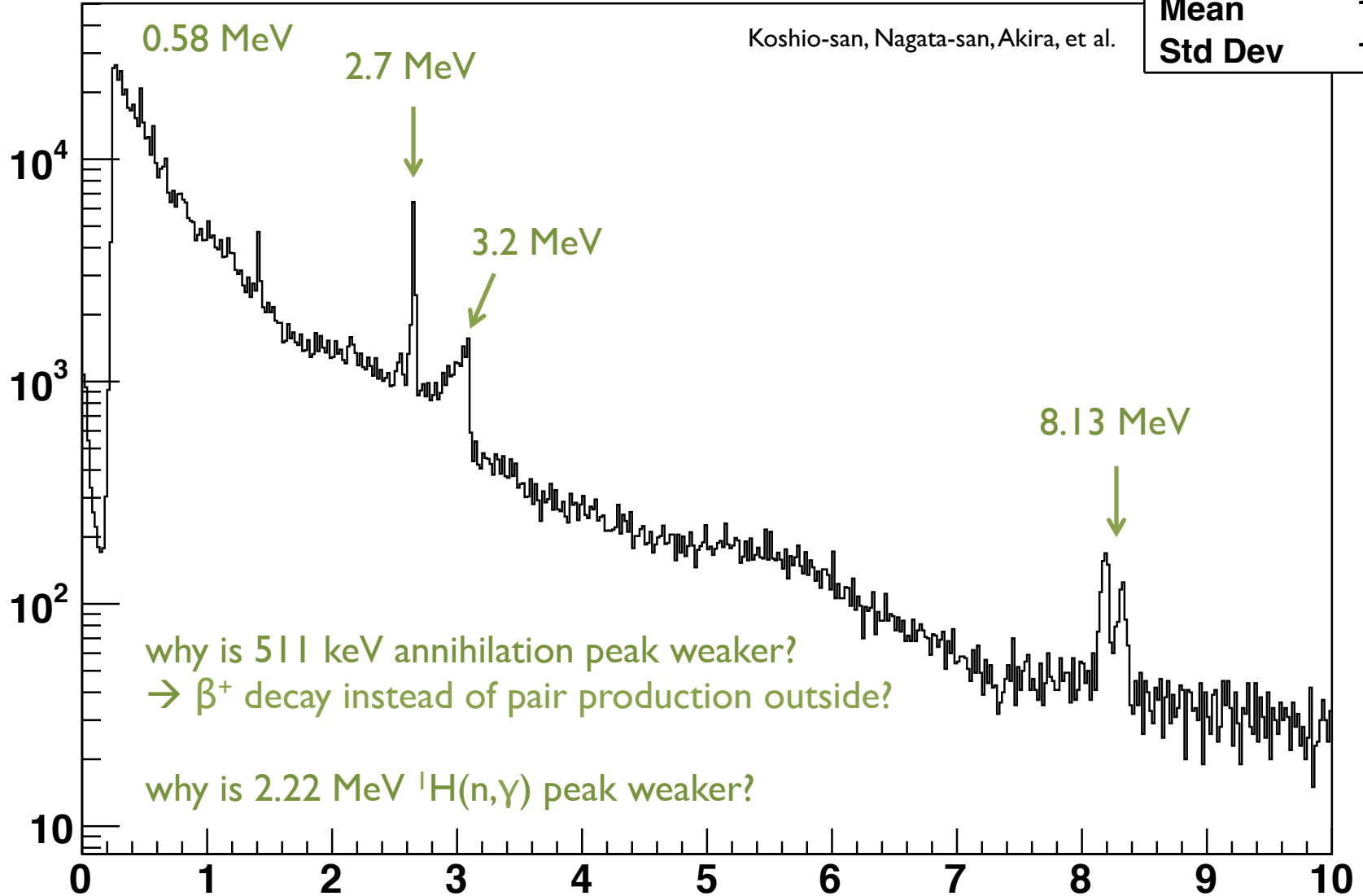
E493

beam

E493_Ge#1_20170221_beam_#0007.pdf

HPGe	
Entries	698385
Mean	1.165
Std Dev	1.317

Koshio-san, Nagata-san, Akira, et al.

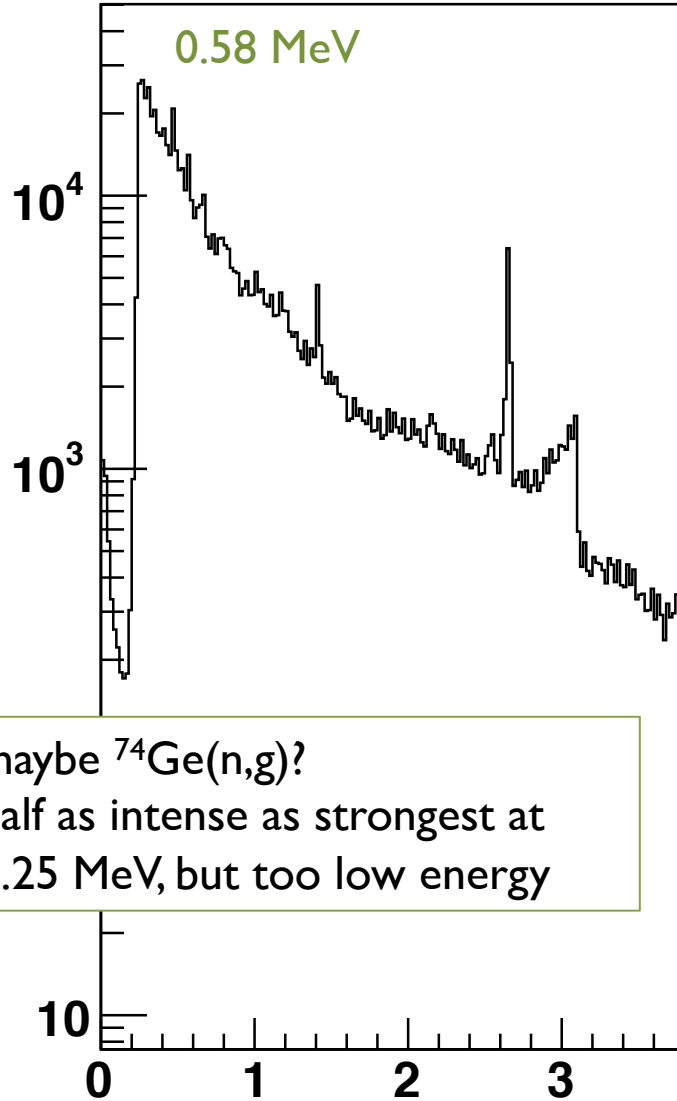


E493
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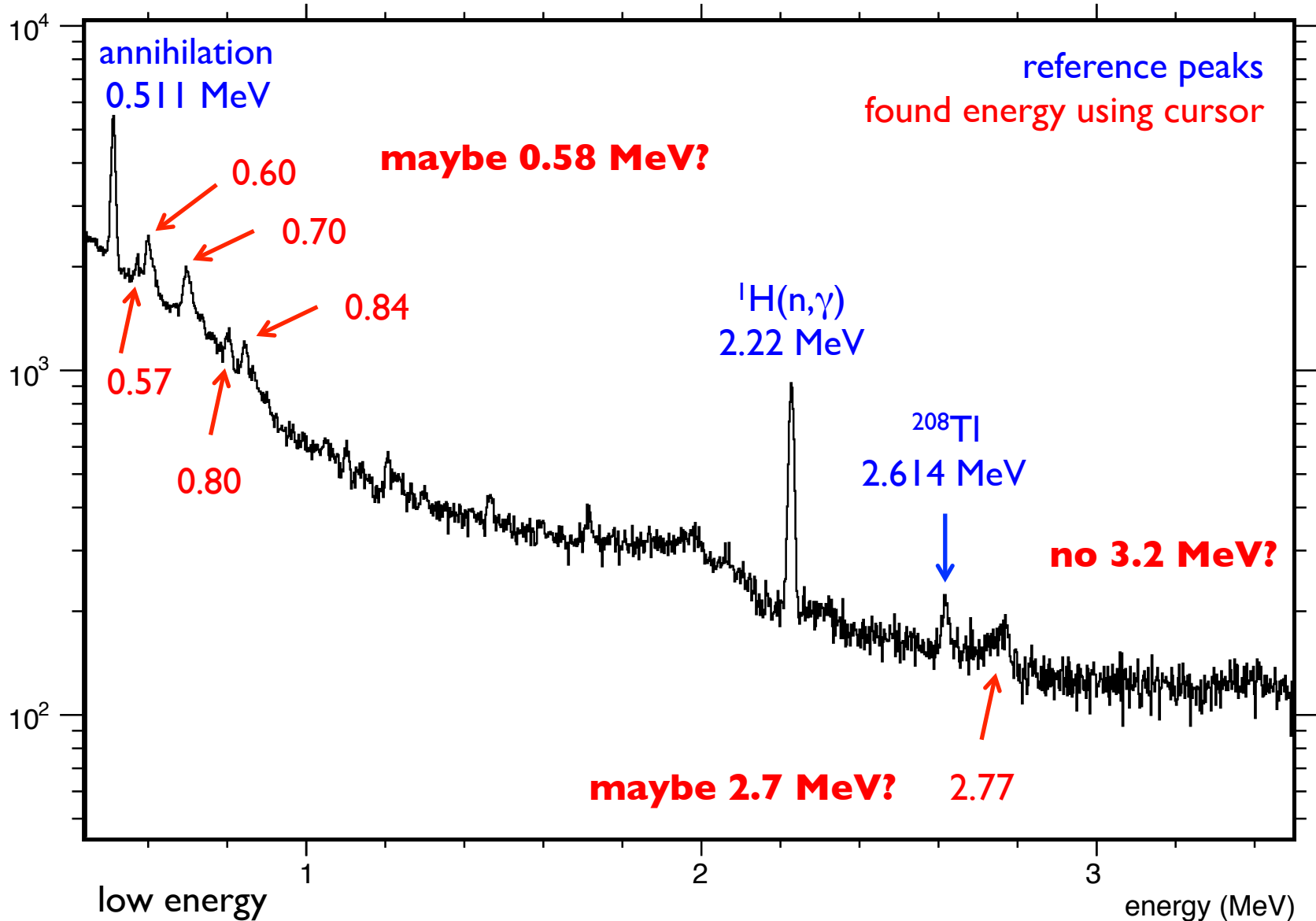
Koshio-san, Nagata-san, Akira, et al.



maybe $^{74}\text{Ge}(n,g)$?
half as intense as strongest at
0.25 MeV, but too low energy

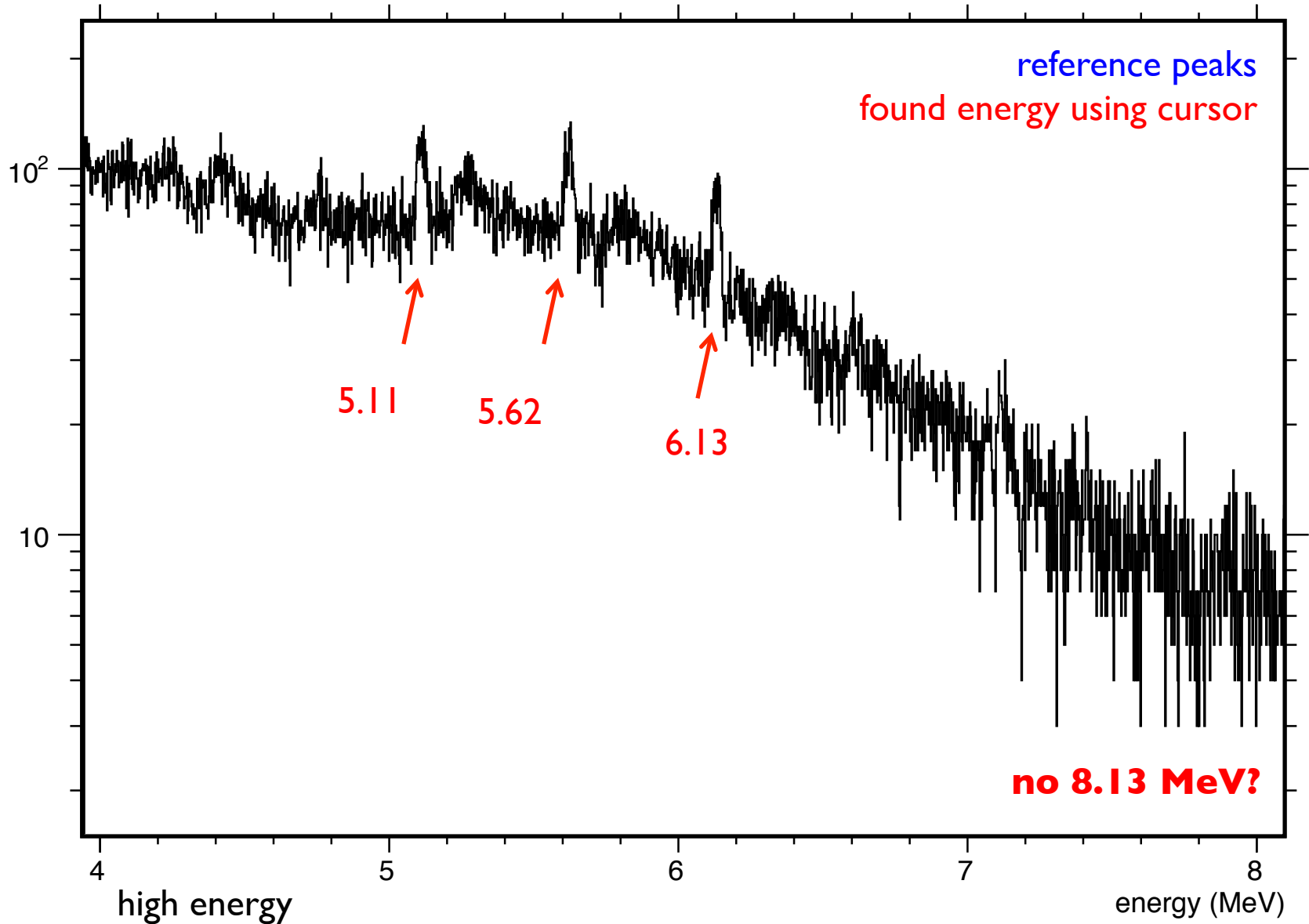
Target Nucleus= ^{74}Ge			
Strongest transition		$E_\gamma=253.01\pm 0.10$ keV	$\%I_\gamma=32.00\pm 4.00$
E_γ (keV)	ΔE_γ (keV)	$I_\gamma/I_\gamma(\text{max})$ (%)	$\Delta(I_\gamma/I_\gamma(\text{max}))$
52.50	0.10	10.81	2.00
139.81	0.10	35.81	6.41
177.29	0.11	20.19	3.64
204.09	0.10	9.50	1.72
236.25	0.11	0.97	0.17
253.01	0.10	100.00	17.68
310.89	0.10	4.03	0.73
317.14	0.10	6.12	1.12
321.89	0.21	3.41	0.78
443.48	0.11	1.22	0.24
444.95	0.10	16.00	2.90
444.95	0.10	16.00	2.90
457.24	0.10	12.00	2.17
481.71	0.10	15.00	2.67
562.28	0.13	1.34	0.28
568.89	0.23	1.00	0.28
570.02	0.20	4.09	1.07
574.98	0.10	49.50	8.91

E465
30 cm from water target, Pb shielding, 40 nA intensity, 3580 s livetime
20160612_1744_Ge_beam_physics_0029



E465
30 cm from water target, Pb shielding, 40 nA intensity, 3580 s livetime

20160612_1744_Ge_beam_physics_0029



E465

60 cm low, water target, 40 nA intensity, 2330 s livetime

20160612_0809_Ge_beam_test_0018

