Additional Data for
'γ-ray spectrum of Cs-137 using NaI detector'

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November 17, 2014

1 Introduction

We were asked to collect more data and obtain a graph that more confidently represents the shape of the graph.

2 Observations

The preset time was set to 10 seconds and three sets of reading were taken to generate the error bars. The operating voltage was set to 550 V. In the previous experiment we'd taken 19×3 datapoints, whereas in the following, we have 60×3 datapoints. [1]

And following is data corresponding to the graph.

Listing 1: Experimental Observations

Voltage	Count	Count	Count [in 10 seconds]
0	4988	5113	4983
0.05	5058	5130	5042
0.1	5081	4919	4989
0.2	4776	4697	4807
0.3	4481	4432	4476
0.4	4362	4398	4339
0.5	4219	4262	4252
0.6	4301	4270	4230
0.7	4244	4173	4159
0.8	3981	3947	4074
0.9	3639	3630	3568
1	2951	3021	3078
1.1	2630	2683	2634
1.2	2641	2690	2696
1.3	3196	3238	3257
1.35	3752	3929	3802

[1] Note that this experiment was performed on a different machine and its operating voltage had been determined before performance of the experiment to be 550 V.

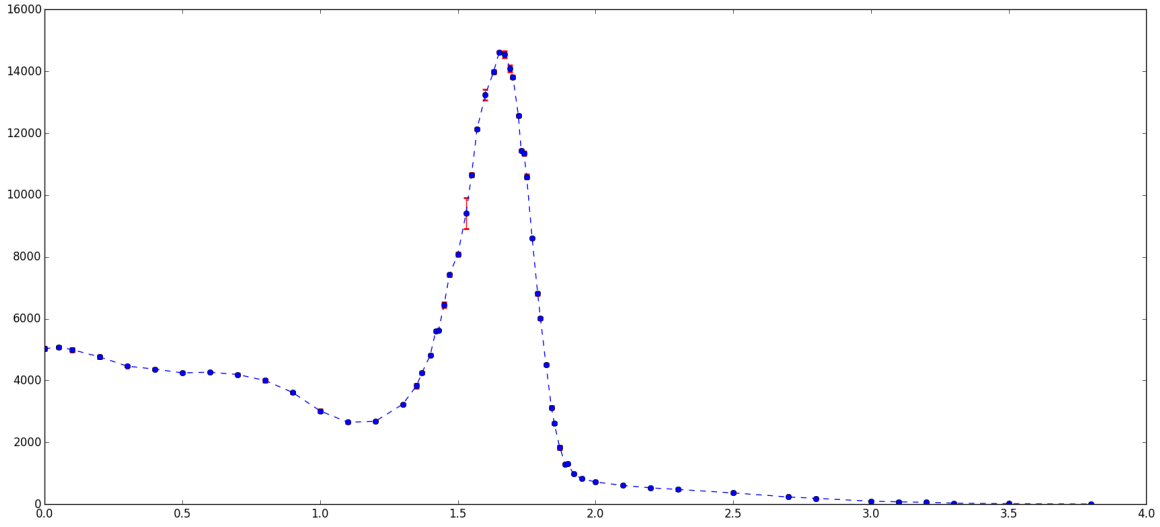

Figure 1: Observed Spectrum with error bars. The y-axis is counts per 10 seconds and x- axis is voltage in volts.

1.37	4226	4216	4310
1.4	4852	4775	4835
1.42	5661	5553	5600
1.43	5643	5636	5606
1.45	6556	6410	6349
1.47	7502	7386	7387
1.5	8009	8174	8073
1.53	9717	9792	8689
1.55	10643	10584	10728
1.57	12196	12118	12097
1.6	13045	13225	13462
1.63	14071	13920	13952
1.65	14570	14635	14639
1.67	14556	14408	14683
1.69	14242	13980	14031
1.7	13822	13731	13878
1.72	12543	12616	12527
1.73	11399	11384	11494
1.74	11313	11438	11297
1.75	10652	10485	10621
1.77	8572	8621	8593
1.79	6747	6871	6801
1.8	6053	6045	5951

1.82	4510	4571	4466
1.84	3188	3070	3115
1.85	2640	2636	2560
1.87	1851	1912	1754
1.89	1257	1332	1295
1.9	1308	1307	1290
1.92	950	971	1021
1.95	821	836	811
2	699	738	712
2.1	603	602	609
2.2	547	512	521
2.3	481	418	529
2.5	384	377	328
2.7	232	232	232
2.8	181	212	170
3	105	98	85
3.1	60	80	84
3.2	54	62	67
3.3	28	34	34
3.5	17	13	11
3.8	1	2	5

3 Conclusion

The dominant peak had, qualitatively the same shape as that of the graph obtained earlier.