Advanced Laboratory Course

K223 – Nuclear γ-γ Angular Correlations – Measurement Data

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We list here our raw, unprocessed data that can also be found in the files

- `K223/data/cfd_threshold_scan`
- `K223/data/prompt_curve`
- `K223/data/SCA`
- `K223/data/main_measurement`

in the form of `.csv` or `.txt` files with corresponding `python` scripts that were used to generate the plots in our lab report.

Threshold scan for the CFD's

Threshold CFD 1	Counts	Threshold CFD 2	Counts
0	203940	0	140231
10	93476	10	95105
16	89580	16	91642
22	85135	22	88665
28	78700	28	82499
34	74363	34	79353
40	69715	40	74137
50	64135	50	68742
60	56065	60	62490
70	50783	70	57668
80	42107	80	51642
90	33787	90	45043
100	28825	100	38136
120	11206	120	26509
150	632	150	368

Table 1: Threshold scan for both CFDs with radioactive source.

Prompt curve measurement

Spectrum scan for the SCA's

Main measurement

Threshold CFD 1	Counts	Threshold CFD 2	Counts
0	91002	0	66467
10	359	10	465
16	250	16	340
22	174	22	198
28	106	28	143
34	98	34	114
40	71	40	85
50	48	50	64
60	59	60	59
70	42	70	48
80	34	80	28
90	37	90	25
100	21	100	19
120	20	120	13
150	7	150	4

Table 2: Threshold scan for both CFDs without radioactive source.