

25.7.88
4.8.82

$$27+30+31+30+31+36 \approx 1366 + 365 + 365 + 365 + 56 = 2031$$

07AUGTE: 6/6

15.7.88

T=200s

Am241 $T_L=200s$ $N=1151517$ (15-28) $N[28-52]=19547$
 $\text{TR} \approx 300s$ $\alpha = 1.13 \mu\text{Ci}$

$$\eta = \frac{1151517/200}{0.85133 \cdot 37000 \cdot e^{-\frac{1151517}{200}}} = 32.88\%$$

(O-57 + 121 + 137) $T_L=200s$ $N=19381$ (38-57)
 $\text{TR} = 222$ $\alpha = 1.74 \mu\text{Ci}$

$$\eta = \frac{19381/200}{129.37000 \cdot e^{-\frac{19381}{200}} \cdot 0.9655} = 38.95\%$$

54Mn 834 $T_L=200s$ $N=14372(767-316)$ $N_{\text{count+total}} = 33976$
 $\alpha = 1.36 \mu\text{Ci}$

$$\eta = \frac{14372/200}{13630000 \cdot e^{-\frac{14372}{200}}} = 17.93\% \quad \frac{\text{count+total}}{\text{total}} = 7.372$$

[30.5]

71-65 1115 $T_L=200s$ $N(341-422)=615157$ [30-412] $N_{\text{count+total}} = 7727363$
 $\text{TR} \approx 360s$ $\alpha = 46620 \mu\text{Ci}$

$$\eta = \frac{615157/200}{46620 \cdot e^{-\frac{615157}{200}}} = 10.0\%$$

$$\frac{\text{count+total}}{\text{total}} = 7.808$$

[24.8]

137Cs $T_L=200s$ $N(701-268)=1142146$ $N_{\text{count+total}} [30-130] = 2107882$
 $\text{TR} \approx 400s$ $\alpha = 33190 \mu\text{Ci}$

$$\eta = \frac{1142146/200}{33190} = 17.21$$

$$\frac{\text{count+total}}{\text{total}} = 1845$$

$\eta_{\text{eff}} = 31.76$

$\times 32$ $N(4-20) = 812596$
(über 37 keV)

$$\eta = \frac{812596/200}{851 \cdot 33190} = 181\%$$

$$51(\text{f}) \quad T_L = 200 \text{ keV} \quad N(90-124) = 61417 \quad N[15-14] = 80022 \\ Q = 346000 \text{ GeV}$$

$$\eta = \frac{61417/200}{34600 \cdot e^{-\frac{148 \text{ GeV}}{200}}} = 28,04$$

$$\eta = \frac{C + dh}{T_R} = 46,3\%$$

$$51(\text{c}) \quad T_L = 200 \text{ keV} \quad N(49-88) = 7675756 \quad N[87-145] = 46711 \\ T_L = 200 \quad T_R = 215 \quad Q = 55440 \text{ GeV} \quad N[30-45] = 3221267 \\ \eta = \frac{7675756/200}{55440 \cdot e^{-\frac{148 \text{ GeV}}{200}}} = 50,79$$

$$\frac{\text{Compton + total } h}{\text{total } h} = 1,303$$

$$109(\text{d}) \quad 88 \text{ keV} \quad T_L = 200 \text{ s}, T_R = 8241$$

$$88 \text{ keV} \quad N(27-47) = 2228390 \quad N[47-28] = 48420 \\ Q = 75220$$

$$\eta = \frac{2228390/200}{75220 \cdot e^{-\frac{148 \text{ GeV}}{200}}} = 56,35\%$$

77 keV $\text{key } N(618) / 41785633$
(Rho 27564)

$$\eta = \frac{41785633/200}{75220 \cdot e^{-\frac{148 \text{ GeV}}{200}}} = 15,04$$

$$109(\text{d}) \quad 88 \text{ keV} \quad T_L = 200 \text{ s} \quad T_R = 210 \text{ s}$$

$$N(17-47) = 1216985 \quad N[47-28] = 72818$$

$$\eta = \frac{1216985/200}{72818 \cdot e^{-\frac{148 \text{ GeV}}{200}}} = 30,68\%$$

$$R = \frac{30,68}{56,35} = 0,544$$

$$\eta_{\text{ZIPMUL}} = 0,544 - R,04 = 8,2\%$$

$$241 \text{ Am} \quad T_L = 200 \text{ s} \quad T_R = 206 \text{ s} \quad N(15-21) = 934478 \\ N(28-44) = 12705$$

$$\eta = \frac{934478/200}{1,33 \cdot 320000 \cdot 0,79} = 26,5\%$$

$$137(\text{s}) \quad T_L = 200 \text{ s} \quad N(198-255) = 1001086 \quad N[255-480] = 17129 \\ T_R = 215 \text{ s}$$

$$\eta = \frac{1001086/200}{33190} = 11,33\%$$

$$7n-65 \quad T_C = 200 \text{ s} \quad N(335-404) = 580088 \quad N[404-75] = 10652 \\ T_D = 214 \text{ s}$$

$$\eta = \frac{580088/200}{46620 \cdot e^{-\frac{148 \text{ GeV}}{200}}} = 9,65\%$$

$$139(\text{e}) \quad T_L = 200 \text{ s} \quad N(49-82) = 193776; N[82-143] = 37362 \\ T_D = 215 \text{ s}$$

$$\eta = \frac{193776/200}{55440 \cdot e^{-\frac{148 \text{ GeV}}{200}}} = 37,45\%$$

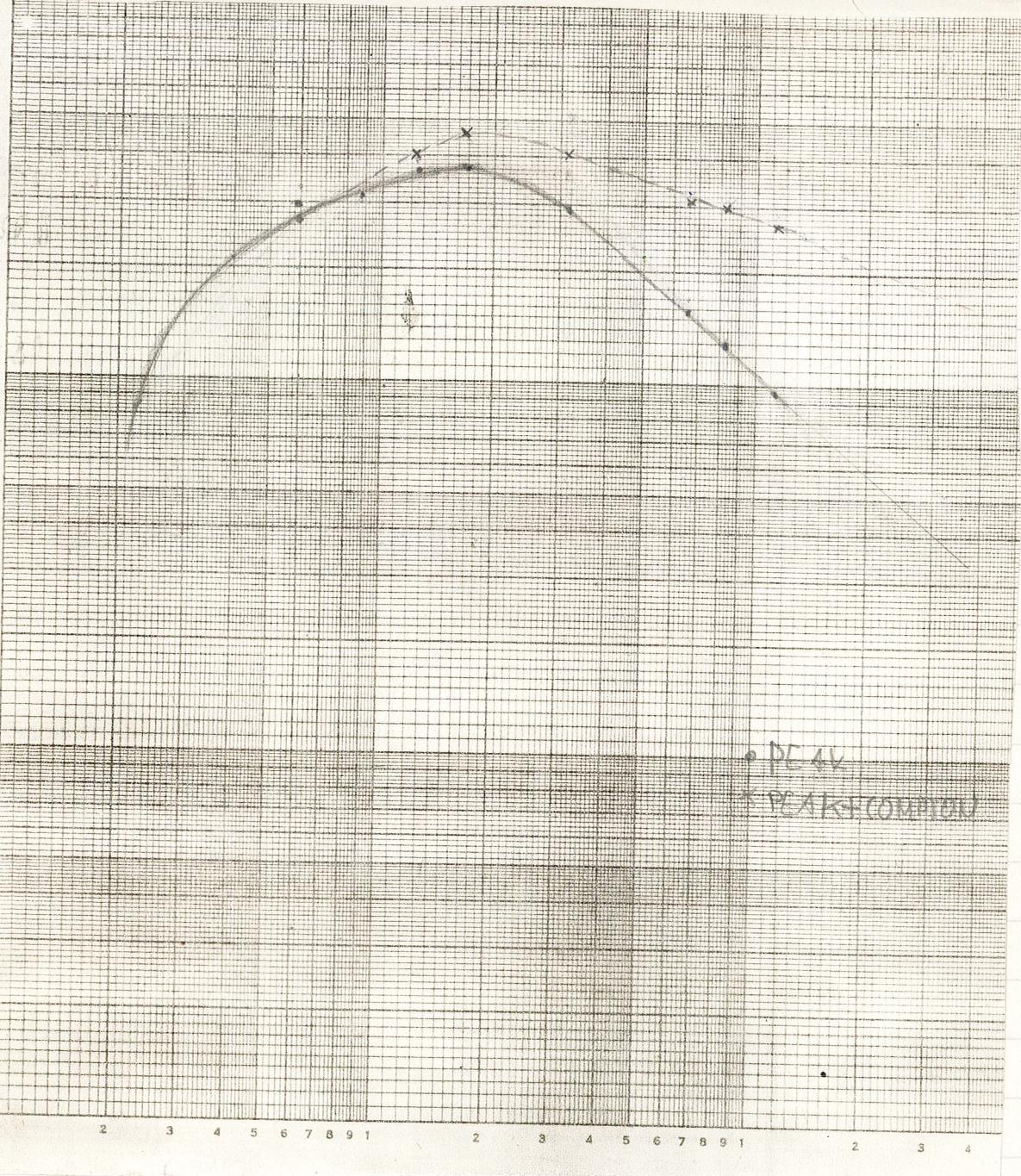
$$607 \quad T_L = 200 \text{ s} \quad N = 18210 \quad \eta = 36,54$$

$$51(\text{f}) \quad T_L = 200 \quad T_R = 206 \quad N(91-122) = 63254 \quad \eta = 28,8\% \\ 51(\text{c}) \quad T_L = 200 \quad T_R = 201 \quad N(91-121) = 62995 \quad N(10-170) = 81509 \quad \eta = 28,76$$

$$761 \text{ Am} \quad T_L = 200 \text{ s} \quad T_R = 215 \quad N(15-28) = 2219884 \quad N[28-48] = 61387$$

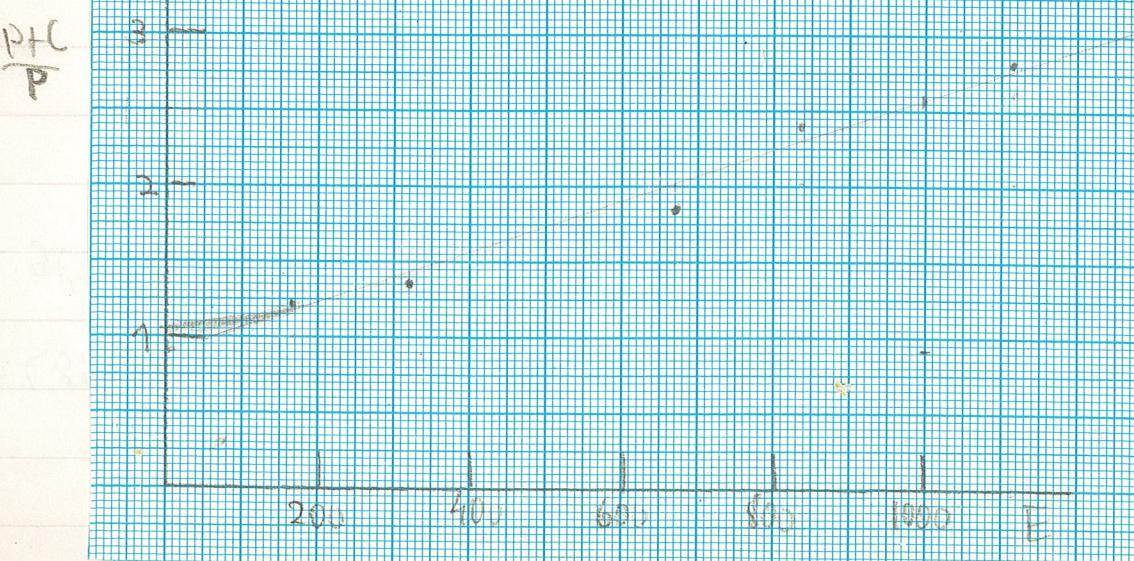
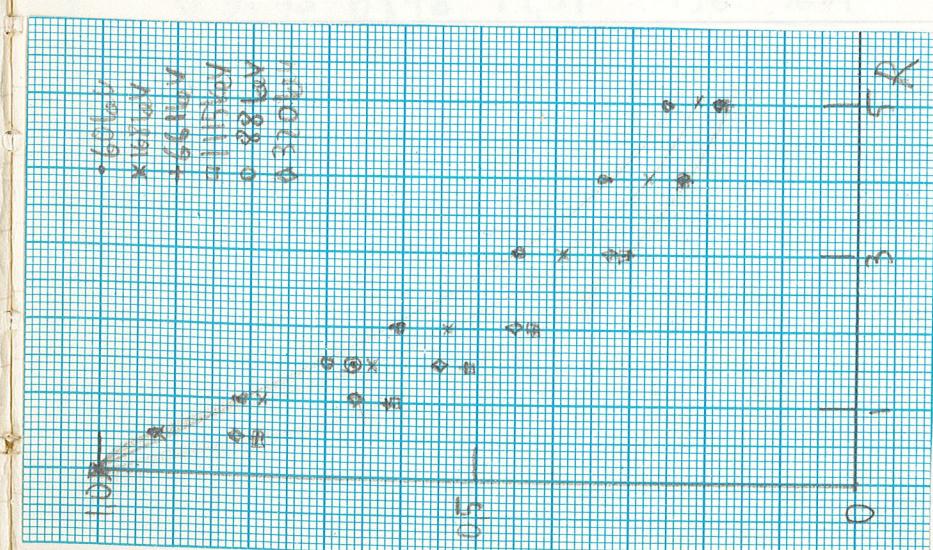
$$N = \frac{2219884/200}{36850} = 30,95\%$$

$$109(\text{d}) \quad T_L = 200 \quad T_R = 210 \quad N(73-47) = 1748458 \quad N[44-21] = 26115 \\ N = 1734573 \quad \eta = 31,4$$



	Am 60 keV N(18-78) N _p [78-48]	N _{tot}	N/N _{tot}	(e) 139, 168 keV N(47-82) N[82-41]	N _{tot}	N/N _{tot}	16.2.88
0	1113073	36848	1150821	1	921834	20113	941697
0.5	1040330	31465	1071775	0.9310	860161	15779	875890 0.9296
1	919778	25920	945198	0.8204	726387	16744	738122 0.7828
1.5	201154	70706	768350	0.6659	595814	9451	605819 0.6418
2	686992	17797	704289	0.6000	500156	8749	508605 0.5380
3	509534	12075	521609	0.4504	361488	6688	368176 0.3886
4	325489	9635	385124	0.3312	263530	5982	269512 0.2834
5	782474	8869	296273	0.2536	198282	4854	203136 0.2127
0.2			9978			3518	

	D2(S-66) 1 keV N(184-776) N _p [776-466]	N _{tot}	N/N _{tot}	D2(S-66) 1 keV N(334-404) N _p [404-762]	N _{tot}	N/N _{tot}	16.2.88
0	505777	9193	514970	1	290704	5911	296615
0.5	402103	6717	408820	0.7934	730449	4144	734593 0.7905
1	314595	4625	319770	0.6190	177699	2777	180476 0.6076
1.5	767735	3873	266558	0.5166	150723	7112	152635 0.5136
2	217805	2956	220761	0.4274	125308	1607	126915 0.4267
3	157574	7750	159824	0.3088	90953	1748	92201 0.3094
4	118783	1819	120102	0.2315	68453	1014	69467 0.2326
5	90570	1693	97763	0.1773	52457	979	53386 0.1783
0.2		1183				608	



(d-108) $\frac{N_{tot}}{N_{tot}(0)}$ N_{tot}^{73} N_{tot}^{88}

d	616944	14085	1	$\frac{N_{tot}}{N_{tot}(0)}$
0	616944	14085	1	
0.5	562863	17846	0.9209	
1	501848	14724	0.8112	
1.5	437186	11414	0.7033	
2	377208	9347	0.6050	
3	279903	8000	0.4483	
4	211989	7000	0.3390	
5	161018	6500	0.2773	

07102E 590

630119

6 STD RCL 10

1 { 0 } 1
1 3

2 RCL = 12

3 { 0 } Vx 13
2 - 14

4 1/x 1 15

5 STD ~~16~~ 16

6 { 0 } ~~18~~ 17
3 RST ~~17~~ 17

7 RLC RST 19

8 { 0 }

9 y^x

(F-51)

$N(99-124)$ $\frac{u}{N_{tot}}$
29112

28595 1

73339 0.8162

19162 0.6182

15724 0.5699

17885 0.4506

9324 0.3261

6685 0.2338

5276 0.1845

60kell

n=10 50 \rightarrow 500 10.000

d	R	k(m)	$d_0 = k(m)d$	k(n)	$d_0(50)$	R(500)	$d_0(500)$	$d_0(1000)$	(kD^6)
0	1	$\frac{1}{10^7}$	$\frac{1}{10^8}$						
0.5	0.9310	1397	6985	699	350	6993	3497	139867	$68934 \frac{1}{10^6}$
1	0.8204	5002	5002	2521	252	777	777	50514	$50514 \frac{1}{10^6}$
1.5	0.6659	7910	3615	1865	186	1629	7189	79197	$43796 \frac{1}{10^6}$
2	0.6100	1973	3946	1007	701	8011	7012	20130	$44506 \frac{1}{10^6}$
3	0.4504	1704	3612	6719	187	626	1878	11137	$37611 \frac{1}{10^6}$
4	0.3312	8159	3424	4475	179	452	1801	9049	$3696 \frac{1}{10^6}$
5	0.236	6800	3900	3595	180	364	1420	7788	$36440 \frac{1}{10^6}$
				705		1.94		1.92	

88kell

h0

k(10) d(10) k(1000) d(1000)

d	1
0.5	0.9204
1	0.8112
1.5	0.7033
2	0.6050
3	0.4483
4	0.3390
5	0.2773

$$\frac{1}{0.5-0.5-1} = \frac{1}{\frac{1}{2}-\frac{1}{2}-1} = \frac{1}{\sqrt{2}-1} = \sqrt{2}+1$$

$$P_1 \cdot (1-P_2) + P_2 (1-P_1) + P_1 P_2 =$$

$$1 - P_1 P_2 - P_1 P_2 \cdot P_1 = 1 - P_1 P_2$$

$$P(1 - P_1 \cdot P_2 \cdot P_3 \cdot P_4 \dots) = 1 - P_1 P_2 - P_1 P_2 \cdot P_1 = 1 - P_1 P_2$$

168 keV

k(5) d(5) k(10) d(10)

0

0,5	0,9296	6,7,99	13,0	13,6,7	6,83
1	0,7828	1,9,92	1,9,92	4,0,34	4,0,3
1,5	0,6418	10,78	16,2	17,05	3,3,1
2	0,5380	7,5,76	11,2	15,64	3,1,3
3	0,3886	4,807	14,4	10,08	3,0,2
4	0,2834	3,486	13,9	7,4,41	7,8
5	0,2127	2,756	13,8	5,6,73	7,9,9 3,0,9

320 keV k(10) d(10) k(5) d(5) k(3) d(3)

0

0,5	0,8162	4,8,74	7,4,37	2,4,12	12,06	14,38	2,14
1	0,6782	2,3,41	2,3,41	1,1,46	11,46	0,684	6,68
1,5	0,5449	15,98	7,3,47	7,7,45	11,62	4,4,58	6,69
2	0,4506	17,05	7,4,10	5,7,85	11,17	3,285	6,57
3	0,3261	8,434	2,1,30	3,981	11,94	2,708	6,62
4	0,2338	6,393	2,5,57	2,965	11,86	1,604	6,42
5	0,1845	5,431	2,2,16	7,489	12,45	1,322	6,61 6,60

661 keV k(3) d(3) k(7) d(2) k(2,2)

0

0,5	0,7634	12,47	6,23	8,152	4,08	9,01	4,51
1	0,6190	5,56	8,56	3,690	3,69	4,10	4,10
1,5	0,5166	4,060	6,09	2,156	3,83	2,885	4,78
2	0,4224	3,053	6,11	1,888	3,78	2,170	4,74
3	0,3088	2,085	6,26	1,271	3,75	1,417	4,75
4	0,2315	1,590	6,36	1,977	3,71	1,059	4,73
5	0,1773	1,182	6,41	0,777	3,64	0,837	4,18 5,21

1115 keV k(2)

0

0,5	0,7905	8,017	4,01
1	0,6076	3,573	3,52
1,5	0,5136	2,529	3,79
2	0,4267	1,884	3,77
3	0,3094	1,773	3,76
4	0,2326	0,932	3,73
5	0,1783	0,731	3,65 3,71