13:55 S1 -20, +40

S2 rate 540 kHz before
520 kHz after?

Interrupted by check of position on TA0 with ~~...~~ grid

~~Maximum~~ Shift over.

Maximum intensity on SEETRAM was 1.3 * 10^9,
1s extraction, fast ramping (1s)
SC121: 530 kHz
SC141: 54 kHz

25.3.2014

~~22~~:00

we scale by 1...

GTS MU1 didn't come. we put Voltage by hand.
V= 542 as in setting 28.

22:30 Beam on and we open shut

26.3.2014

We check the centering on TA because we have factor 4 less counts in S4.
Now beam is centered and we check again

We doubly checked the matter and all looks fine.
The amount of ^{64}Fe produced decreased.
We open slits

07:16 small break on beam (whos)
08:10 "
08:30 intensity $4.5 \cdot 10^8$ for ~2 min
Rg = S2 beam not centered

09:25 Changing S1 slits from -15...45 to -45...15
and checking beam purity
Lund-File

10^{20} At 4s spill we have with $8 \cdot 10^8$/spill on Seetram
S2: $680 \cdot 10^3$/spill
S4: 5000/spill

At 1s spill we have $1.2 \cdot 10^3$/spill on Seetram
S2: $320 \cdot 10^3$/spill
S4: 4700/spill

~11:00 Check again on TA ~~and~~ at peg and end of spill
The loss is in the beamline between S1S and FRS
The optimization will take place after lunch meeting.

12:24 There was beam [redacted] for around 10 mins at 11:50. There is no beam currently.

13:08 We got beam for something like half an hour and now the Files are closed. The beam is to be optimized.

16:25 opened MEG+ME7 to enter, dipoles off

18:30 Close caves scale by 1 TA-S4
^{64}Fe (S426_28) OK!

We scale to ^{65}Fe

$$TA\text{-}S1 = \frac{9.9234}{10.2759} = 0.96569$$

$$S1\text{-}S2 = \frac{9.4722}{9.8263} = 0.96396$$

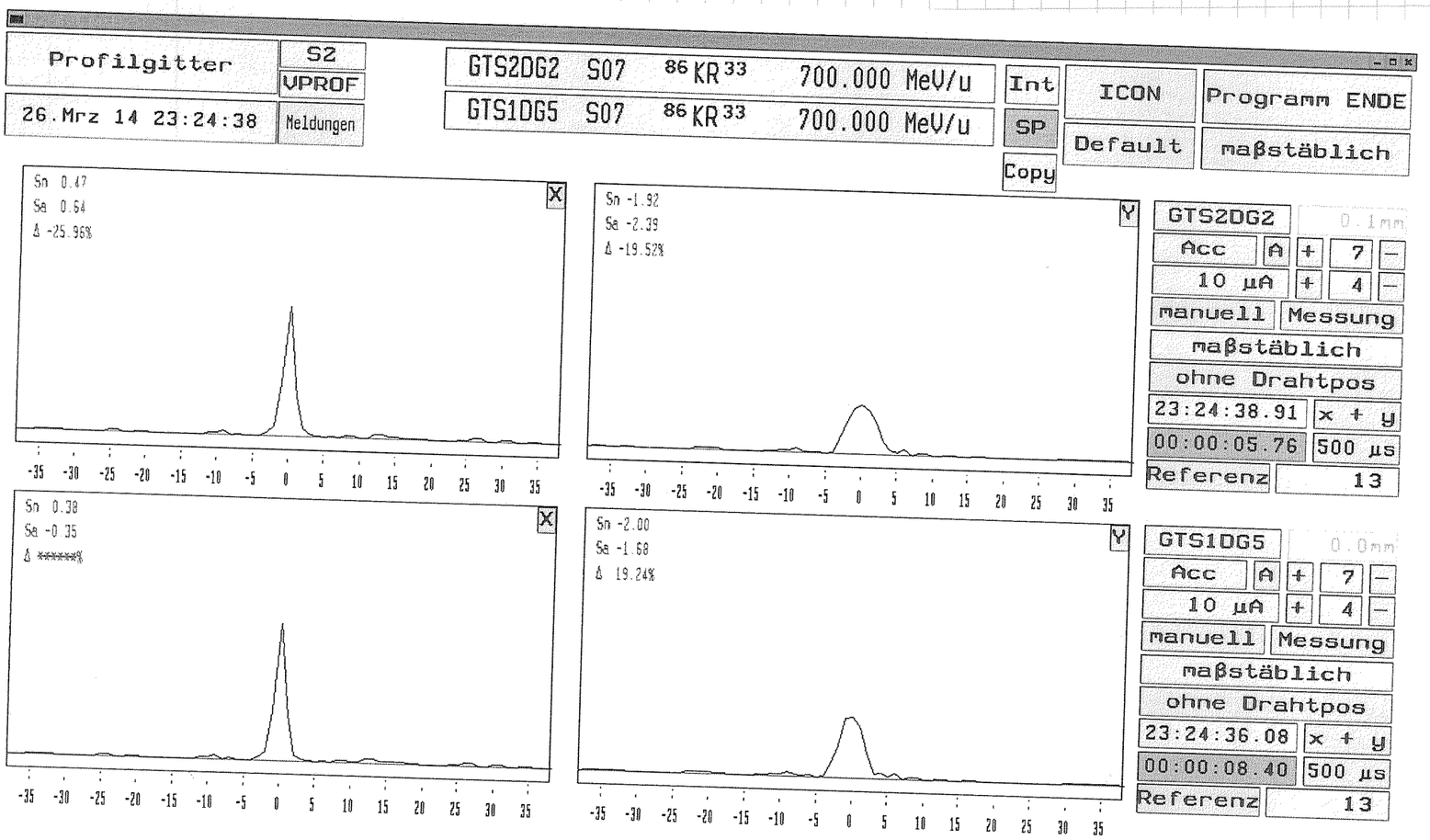
$$S2\text{-}S4 = \frac{7.9735}{8.3373} = 0.956365$$

22:50: The drive of the S2 angle is not moving.
The angle set is 60.7.
The angle needed was 62.1.

23:25 We center on target.
Close slits S2 and S4.

21 22 ^{62}Fe 58Ni 3,1mm 58deg Sg

S426_29 FS 86 Kr 700 MeV sekram 2-Sg Be Ta 81 deg Sg



Final. 0.5 mm shifted or X2

Magnetwerte/-status für Konsole FS	
Experimentplatz	HFS
Experimentnummer	S430
Beschleuniger	S07
Task	FSMS
Version	FSMS

A,ζ	MeV/u	Bρ [Tm]	bis
$^{86}Kr^{33+}$	11.200	1.2581	GS08BE2F
$^{86}Kr^{33+}$	700.000	11.6315	GTS1ET5
$^{86}Kr^{33+}$	700.000	11.6315	GTS3ED7L
$^{86}Kr^{33+}$	700.000	11.6315	Ende

27. Mar 2014
00:20:11.13

Name	AccStatus: ●aktiv ○inaktiv	Acc	Strom$_{Ist}$	Strom$_{Soll}$	Volt$_{Ist}$	Volt$_{Soll}$	B'·ρ$_{Ist}$	B'·ρ$_{Soll}$	Mode	Status	Fehler (Bit 0..15)
GTE1KY1	●○○○○○○○○○○○○○○○	S07	-9.622	-9.521	-0.962	-0.952	-0.00439	-0.00435	I->F	07FFFFFF	
GTE1QD11	●○○○○○○○○○○○○○○○	S07	51.623	51.645	1.877	1.878	-1.25332	-1.25386	I->F	07FFFFFF	
GTE1QD12	●○○○○○○○○○○○○○○○	S07	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTE1MU1	●○○○○○○○○○○○○○○○	S07	693.257	693.675	6.028	6.032	1.51782	1.51880	I->F	07FFFFFF	
GTS1MU1_0	●○○○○○○○○○○○○○○○	S07	0.002		0.002		0.00000		Dmy	FFFFF86	Regler abgeglichen
GTS1KY1	○○○○○○○○○○○○○○○○	S07	10.739	10.686	1.074	1.069	0.00492	0.00490	I->F	07FFFFFF	
GTS1QD11	○○○○○○○○○○○○○○○○	S07	162.520	162.510	5.417	5.417	6.27051	6.27012	I->F	07FFFFFF	
GTS1QD12	○○○○○○○○○○○○○○○○	S07	179.806	179.880	5.994	5.996	-6.93162	-6.93445	I->F	07FFFFFF	
GTS1MU2	○○○○○○○○○○○○○○○○	S07	319.137	319.204	5.802	5.804	1.53001	1.53057	I->F	07FFFFFF	
GTS2QT11	○○○○○○○○○○○○○○○○	S07	114.719	114.555	1.912	1.909	-2.24431	-2.24083	I->F	07FFFFFF	
GTS2QT12	○○○○○○○○○○○○○○○○	S07	273.330	273.198	4.555	4.553	6.38045	6.37632	I->F	07FFFFFF	
GTS2QT13	○○○○○○○○○○○○○○○○	S07	184.411	184.426	3.074	3.074	-3.60982	-3.61039	I->F	07FFFFFF	
GTS2KS1	●○○○○○○○○○○○○○○○	S07	2.122	2.135	0.250	0.251	0.27007	0.27177	I->F	07FFFFFF	
GTS3MU1	●○○○○○○○○○○○○○○○	S07	453.337	452.974	5.037	5.033	5.26274	5.17927	Hall	07FFFFFF	
GTS3MU1_0	●○○○○○○○○○○○○○○○	S07	0.002		0.002		5.18399		I>B1	FFFFFFFF	--- "---
GTS3KS1	●○○○○○○○○○○○○○○○	S07	15.069	15.068	1.773	1.773	0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3QD11	●○○○○○○○○○○○○○○○	S07	193.182	192.962	3.220	3.216	1.91787	1.91769	I->F	07FFFFFF	
GTS3QD12	●○○○○○○○○○○○○○○○	S07	121.366	121.351	2.023	2.023	-3.78237	-3.77840	I->F	07FFFFFF	
GTS3QD21	●○○○○○○○○○○○○○○○	S07	175.823	175.579	2.930	2.926	2.37545	2.37500	I->F	07FFFFFF	
GTS3KY1	●○○○○○○○○○○○○○○○	S07	0.020	0.000	0.009	0.000	3.44354	3.43894	I->F	07FFFFFF	
GTS3QD22	●○○○○○○○○○○○○○○○	S07	198.804	198.713	3.313	3.312	0.00002	0.00000	I->F	07FFFFFF	
GTS3KS2	●○○○○○○○○○○○○○○○	S07	12.322	12.291	1.450	1.446	-3.89454	-3.89312	I->F	07FFFFFF	
GTS3MU2	●○○○○○○○○○○○○○○○	S07	433.396	431.546	4.816	4.795	1.56823	1.56431	I->F	07FFFFFF	
GTS3KS3	●○○○○○○○○○○○○○○○	S07	0.405	0.387	0.048	0.046	-4.94744	-4.92958	Hall	07FFFFFF	
GTS3QT31	●○○○○○○○○○○○○○○○	S07	179.247	178.989	2.987	2.983	-4.95088		I>B1	--- "---	
GTS3QT32	●○○○○○○○○○○○○○○○	S07	287.906	287.854	4.798	4.798	-3.52151	-3.51663	I->F	07FFFFFF	
GTS3KY2	●○○○○○○○○○○○○○○○	S07	-0.011	0.000	-0.000	-0.005	0.05150	0.04927	I->F	07FFFFFF	
GTS3QT33	●○○○○○○○○○○○○○○○	S07	191.461	191.239	3.191	3.187	-0.00001	0.00000	I->F	07FFFFFF	
GTS4QT11	●○○○○○○○○○○○○○○○	S07	161.119	160.968	2.685	2.683	-3.76220	-3.75812	I->F	07FFFFFF	
GTS4KY1	●○○○○○○○○○○○○○○○	S07	0.010	0.000	0.005	0.000	-3.16426	-3.16135	I->F	07FFFFFF	
GTS4QT12	●○○○○○○○○○○○○○○○	S07	242.000	241.905	4.033	4.032	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT13	●○○○○○○○○○○○○○○○	S07	149.236	149.109	2.487	2.485	5.66781	5.66524	I->F	07FFFFFF	
GTS4KS1	●○○○○○○○○○○○○○○○	S07	0.488	0.462	0.057	0.054	-2.93546	-2.93295	I->F	07FFFFFF	
GTS4MU1	●○○○○○○○○○○○○○○○	S07	363.741	363.957	4.042	4.044	0.06207	0.05881	I->F	07FFFFFF	
GTS4MU1	●○○○○○○○○○○○○○○○	S07					-4.14974	-4.14314	Hall	07FFFFFF	
GTS4KS2	●○○○○○○○○○○○○○○○	S07	9.979	9.988	1.174	1.175	-4.14317		I>B1	--- "---	
GTS4QD21	●○○○○○○○○○○○○○○○	S07	167.565	166.982	2.793	2.783	1.27010	1.27124	I->F	07FFFFFF	
GTS4KY2	●○○○○○○○○○○○○○○○	S07	-0.001	0.000	0.000	0.000	-3.29108	-3.27983	I->F	07FFFFFF	
GTS4QD22	●○○○○○○○○○○○○○○○	S07	147.972	147.494	2.466	2.458	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD31	●○○○○○○○○○○○○○○○	S07	107.212	106.767	1.787	1.779	2.90441	2.89499	I->F	07FFFFFF	
GTS4QD32	●○○○○○○○○○○○○○○○	S07	160.259	159.845	2.671	2.664	2.10131	2.09227	I->F	07FFFFFF	
GTS4KS3	●○○○○○○○○○○○○○○○	S07	9.375	9.374	1.103	1.103	-3.15569	-3.14761	I->F	07FFFFFF	
GHFSMU1	●○○○○○○○○○○○○○○○	S07	362.780	362.590	4.031	4.029	1.19318	1.19302	I->F	07FFFFFF	
GHFSMU1	●○○○○○○○○○○○○○○○	S07					4.14604	4.14295	Hall	07FFFFFF	
GHFSMU1_0	●○○○○○○○○○○○○○○○	S07	1.096		1.096		4.14491		I>B1	--- "---	
GHFSKS1	●○○○○○○○○○○○○○○○	S07	0.130	0.035	0.014	0.004	0.00000	0.00443	Dmy	FFFFFFFF	Regler abgeglichen
GHFSQT11	●○○○○○○○○○○○○○○○	S07	101.645	101.464	1.694	1.691	0.01651	-1.99591	I->F	07FFFFFF	
GHFSQT12	●○○○○○○○○○○○○○○○	S07	209.552	209.382	3.493	3.490	-1.99511	4.90685	I->F	07FFFFFF	
GHFSQT13	●○○○○○○○○○○○○○○○	S07	166.741	166.747	2.779	2.779	4.90322	-3.27671	I->F	07FFFFFF	
GHFSKY1	●○○○○○○○○○○○○○○○	S07	-0.008	0.000	-0.004	0.000	-3.27692	0.00001	I->F	07FFFFFF	
							0.00000	0.00000	I->F	07FFFFFF	

0.89345

0.83994

0.90454

0.40395

68Fe Setting

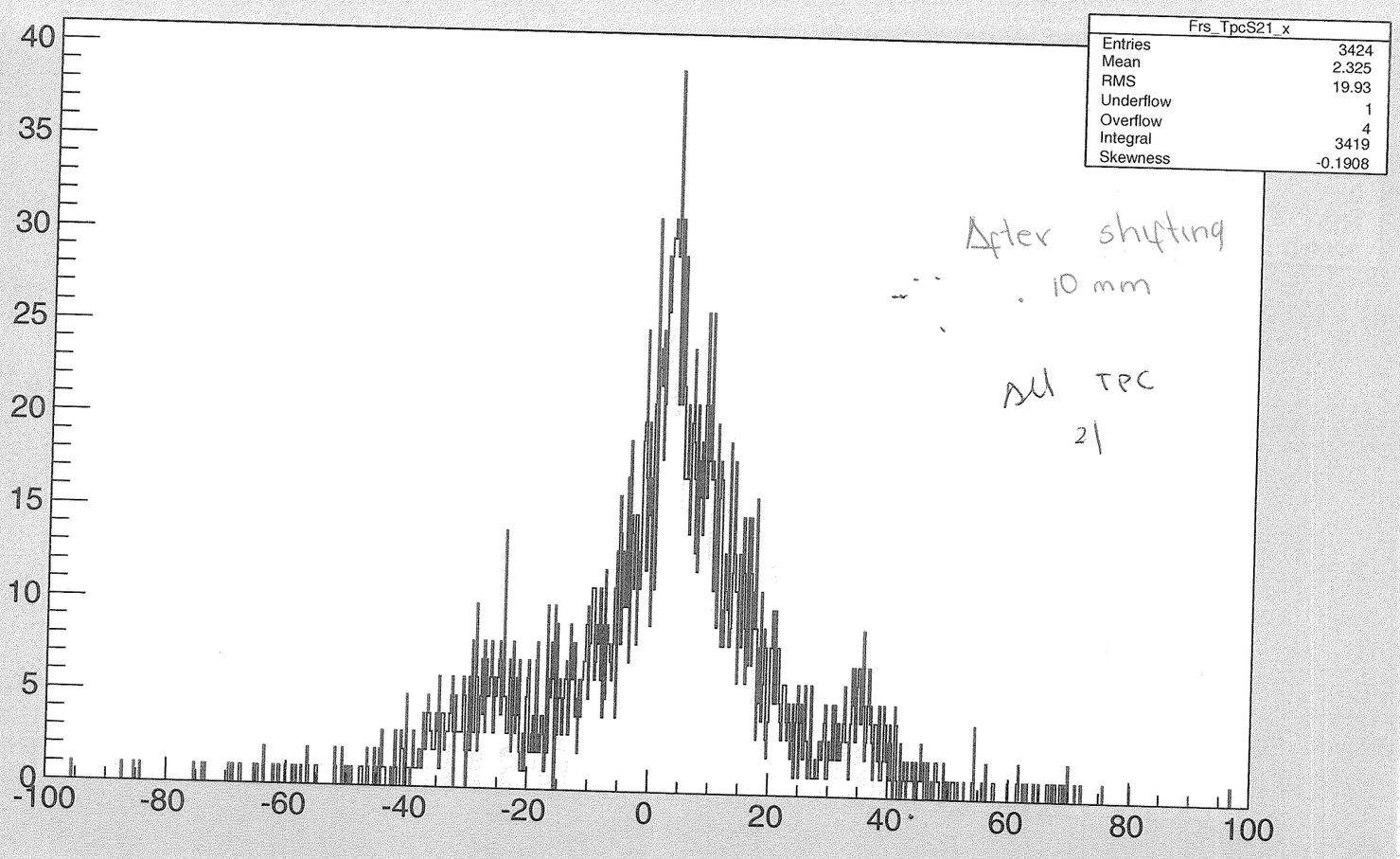
BP1 = 9.923 41

BP2 = 9.4172 2

BP3A = 4.9735

7. Mar 2014 00:20:11.13 SIS-TS-HFS

x 01:22:16 2014-03-27 Analysis/Histograms/Frs/TPCs/TpcS21/Frs_TpcS21_x



Slits S1: -15 15 25 %
S2 -50 50

S1 -15 0 27 %
S2 -50 50

S1 0 15 23 %
S2 -50 50

S1 -~~0~~ ~~15~~ 21 %
S2 -60 50

S1 0 10 27 %
S2 -60 50

~~S1 0 10~~ ~~S2 -50 50~~

S1 -15 0
S2 -60 80

S1 0 10
S2 40 40

S2 ~ ~~350~~ 85 k
S4 ~ ~~4,2 k~~ 500

For 7 10^8

S2 ~ 350 k
S4 ~ 4,2 k

27.3 2014

1:1 ~~Use~~ shift + 10mm S1 - S2

Factor = 0.99705

Scan back

Factor: 1.002958

Slits in S2: E 40 ,20]

Final slits:

S1 0, 10

S2 -410, 20

Intensity = 1.9×10^9

S2 = 370.000

S4 = 7600

Files open.

* To check:
The drive of S2 degrader disc is not working !

1052 file open after asking operators to improve the structure of the spl.

Now

Intensity = 6.5×10^8

S2 = 63.000

S4 = 3500

File 1050

^{62}Fe: ~~1.562 x 10^4~~ 39452

Tngge 10 = ~~1.562 x 10^4~~ 1.562×10^4

$r = 1.2628 \times 10^{-8}$

2.5

3.124×10^{12}

0.000000025

File 1053

^{62}Fe 82276

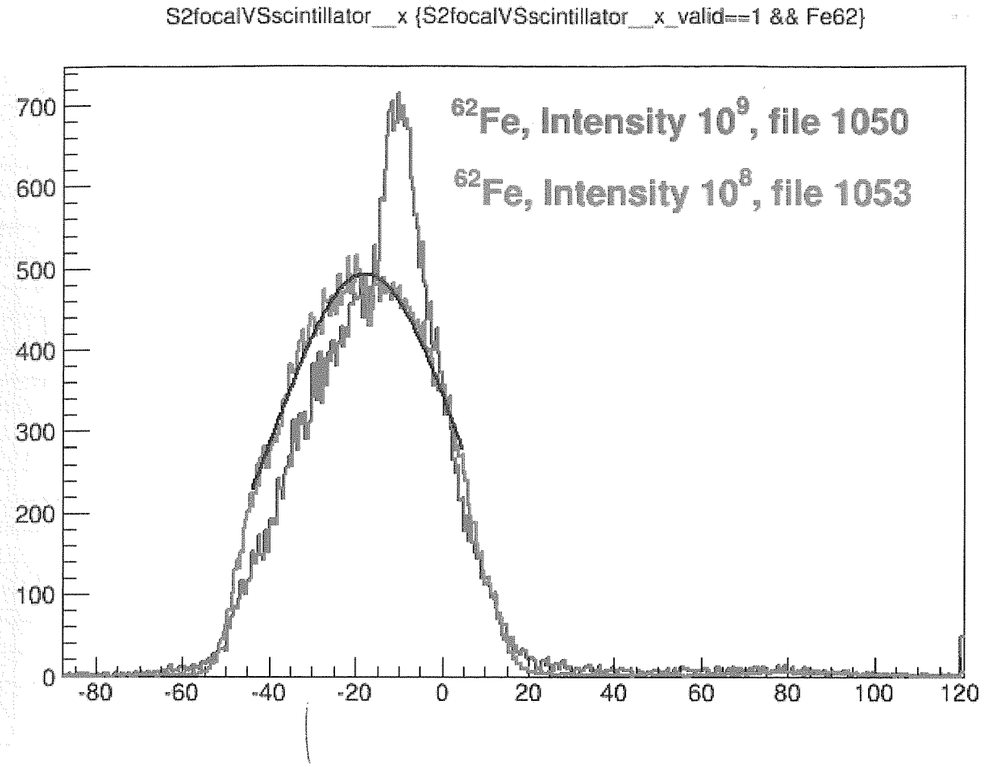
Tngg 10 = 1.613×10^4

$r = 2.5 \times 10^{-8}$

5.1

9.33×10^{11}

0.00000025

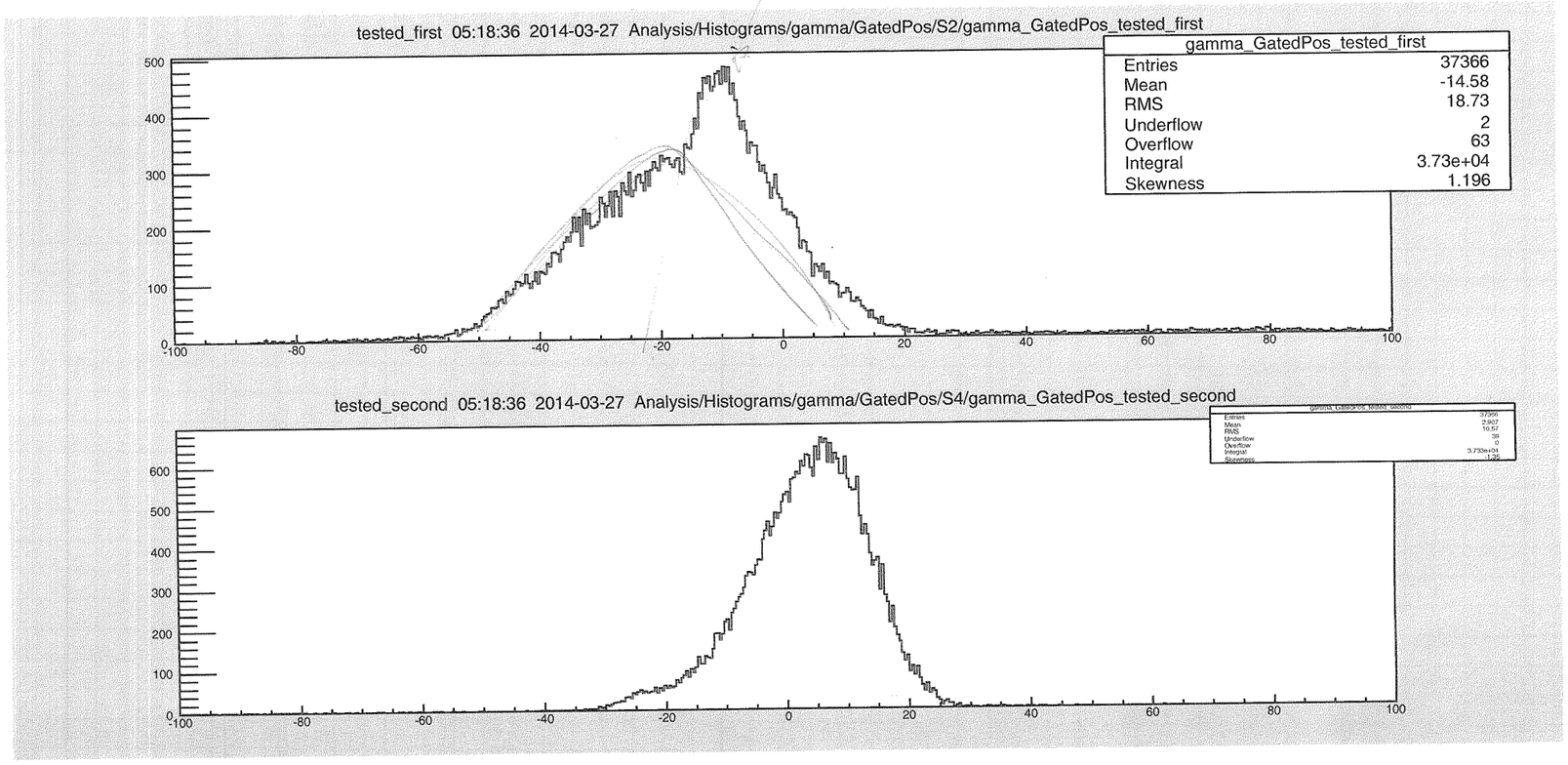


-17.7 mm

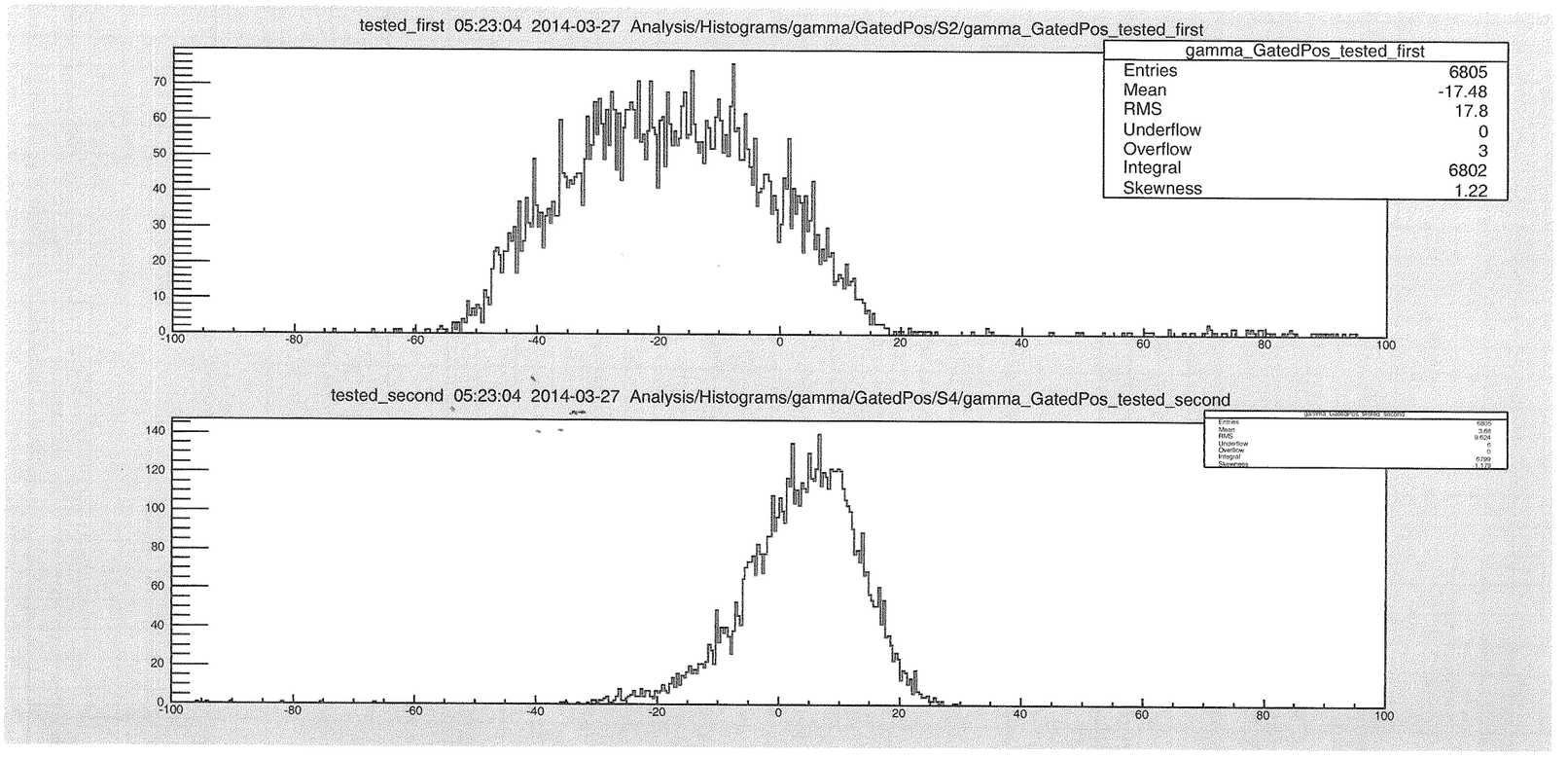
-Around 3:00 am the intensity of the beam was reduced to avoid spikes.

The number of ^{62}Fe identified is still the same

Fil 1050



Fil 1055



11:15 Beam off. Plug in

22:10. Degrader angle set to 62.1

22:15 Insert current grids

Angle recalculated to 62.8

22:35. Beam centering measured with current grids.

Reduction factor for [illegible] 10 = 0.

23:10 we open a file to check

E = 398.

$B\rho_1$ = 9.98
$B\rho_2$ = 9.5312
$B\rho_{34}$ = 8.0444

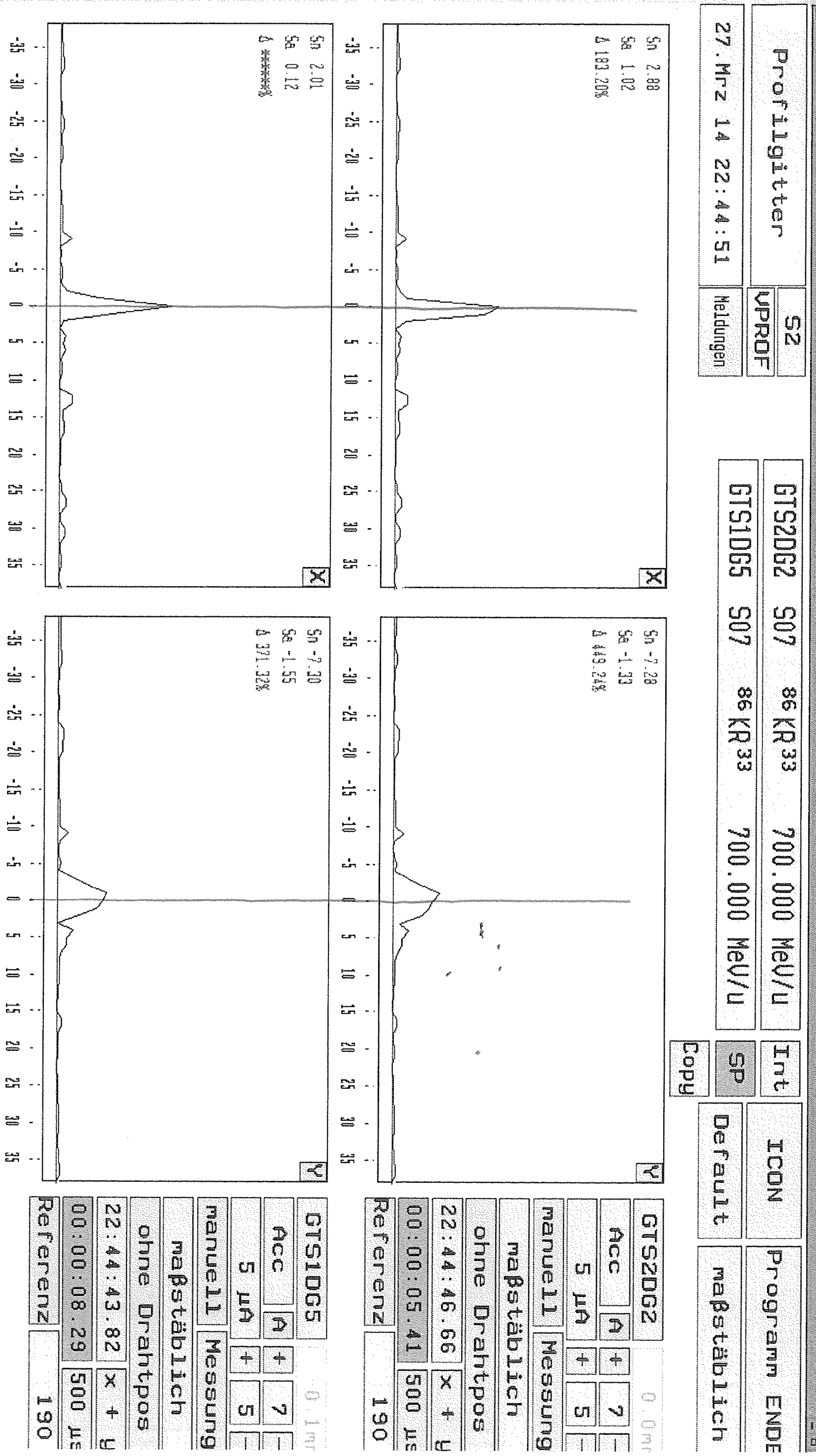
} New to put the primary beam out

TA-S1_1 $\frac{9.98}{9.9234}$ = 1.00570 — file closed 11:34 pm

S1-S2_2 $\frac{9.5312}{9.4722}$ = 1.00623

S2-S4_3-4 = $\frac{8.0444}{7.9735}$ = 1.00889

Kr (699.6 MeV/u) + Be (2565 mg/cm²); Settings on ^{62}Fe; Config: SSDSWDSA



beginning 100 ms

23:50 Finger voltage reduced to 750V

5426_30

sectram, Ta: 2.5g/cm² S1: 2g/cm². SC21: 3.1mm S2: 5g/cm²

Finger 1mm

27. Mar 2014
23:52:57.10

FS

A, ζ	MeV/u	B·ρ [Tm]	bis
$^{86}Kr^{33+}$	11.200	1.2581	GS08BE2F
$^{86}Kr^{33+}$	700.000	11.6315	GTS1ET5
$^{86}Kr^{33+}$	700.000	11.6315	GTS3ED7L
$^{86}Kr^{33+}$	700.000	11.6315	Ende

^{62}Fe

Magnetwerte/-status für Konsole FS	
Experimentplatz	HFS
Experimentnummer	S430
Beschleuniger	S07
Task	FSMS
Version	FSMS

Name	AccStatus: ● aktiv ○ inaktiv	Acc	$Strom_{Ist}$	$Strom_{Soll}$	$Volt_{Ist}$	$Volt_{Soll}$	$B' \cdot l_{Ist}$	$B' \cdot l_{Soll}$	Mode	Status	Fehler (Bit 0..15)
GTE1KY1	●○○○○○○○○○○○○○○○	S07	-9.622	-9.520	-0.962	-0.952	-0.00439	-0.00434	I->F	07FFFFFF	
GTE1QD11	●○○○○○○○○○○○○○○○	S07	51.690	51.645	1.880	1.878	-1.25495	-1.25386	I->F	07FFFFFF	
GTE1QD12	●○○○○○○○○○○○○○○○	S07	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●○○○○○○○○○○○○○○○	S07	690.730	691.150	6.006	6.010	1.51231	1.51323	I->F	07FFFFFF	
GTS1MU1_0	●○○○○○○○○○○○○○○○	S07	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○●○○○○○○○○○○○○○○	S07	10.739	10.690	1.074	1.069	0.00492	0.00490	I->F	07FFFFFF	
GTS1QD11	○●○○○○○○○○○○○○○○	S07	162.447	162.510	5.415	5.417	6.26771	6.27012	I->F	07FFFFFF	
GTS1QD12	○●○○○○○○○○○○○○○○	S07	179.806	179.880	5.994	5.996	-6.93162	-6.93445	I->F	07FFFFFF	
GTS1MU2	○●○○○○○○○○○○○○○○	S07	319.623	319.660	5.811	5.812	1.53233	1.53250	I->F	07FFFFFF	
GTS2QT11	○●○○○○○○○○○○○○○○	S07	115.378	115.207	1.923	1.920	-2.25720	-2.25358	I->F	07FFFFFF	
GTS2QT12	○●○○○○○○○○○○○○○○	S07	274.960	274.785	4.583	4.580	6.41842	6.41331	I->F	07FFFFFF	
GTS2QT13	○●○○○○○○○○○○○○○○	S07	185.492	185.476	3.092	3.091	-3.63099	-3.63096	I->F	07FFFFFF	
GTS2KS1	●○○○○○○○○○○○○○○○	S07	2.130	2.146	0.251	0.252	0.27106	0.27308	I->F	07FFFFFF	0.89845
GTS3MU1	●○○○○○○○○○○○○○○○	S07	455.892	455.547	5.065	5.062	5.29228	5.20868	Hall	07FFFFFF	
GTS3MU1	●○○○○○○○○○○○○○○○	S07					5.21256		I>Bl	---"---	
GTS3MU1_0	●○○○○○○○○○○○○○○○	S07	0.005		0.005		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3KS1	●○○○○○○○○○○○○○○○	S07	15.168	15.156	1.784	1.783	1.93041	1.92899	I->F	07FFFFFF	
GTS3QD11	●○○○○○○○○○○○○○○○	S07	194.263	194.041	3.238	3.234	-3.80355	-3.79955	I->F	07FFFFFF	
GTS3QD12	●○○○○○○○○○○○○○○○	S07	122.080	122.080	2.035	2.035	2.38942	2.38926	I->F	07FFFFFF	
GTS3QD21	●○○○○○○○○○○○○○○○	S07	176.904	176.642	2.948	2.944	3.46473	3.45980	I->F	07FFFFFF	
GTS3KY1	●○○○○○○○○○○○○○○○	S07	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●○○○○○○○○○○○○○○○	S07	200.031	199.938	3.334	3.332	-3.91860	-3.91715	I->F	07FFFFFF	
GTS3KS2	●○○○○○○○○○○○○○○○	S07	12.394	12.368	1.458	1.455	1.57748	1.57405	I->F	07FFFFFF	
GTS3MU2	●○○○○○○○○○○○○○○○	S07	436.198	434.267	4.847	4.825	-4.98017	-4.96056	Hall	07FFFFFF	0.841554
GTS3MU2	●○○○○○○○○○○○○○○○	S07					-4.98154		I>Bl	---"---	
GTS3KS3	●○○○○○○○○○○○○○○○	S07	0.412	0.393	0.049	0.046	0.05249	0.05007	I->F	07FFFFFF	
GTS3QT31	●○○○○○○○○○○○○○○○	S07	180.401	180.086	3.007	3.001	-3.54417	-3.53817	I->F	07FFFFFF	
GTS3QT32	●○○○○○○○○○○○○○○○	S07	289.755	289.702	4.829	4.828	6.77993	6.77815	I->F	07FFFFFF	
GTS3KY2	●○○○○○○○○○○○○○○○	S07	-0.011	0.000	-0.005	0.000	-0.00001	0.00000	I->F	07FFFFFF	
GTS3QT33	●○○○○○○○○○○○○○○○	S07	192.633	192.398	3.211	3.207	-3.78522	-3.78088	I->F	07FFFFFF	
GTS4QT11	●○○○○○○○○○○○○○○○	S07	162.566	162.408	2.709	2.707	-3.19265	-3.18962	I->F	07FFFFFF	
GTS4KY1	●○○○○○○○○○○○○○○○	S07	0.010	0.000	0.005	0.000	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT12	●○○○○○○○○○○○○○○○	S07	244.197	244.097	4.070	4.068	5.71908	5.71632	I->F	07FFFFFF	
GTS4QT13	●○○○○○○○○○○○○○○○	S07	150.536	150.427	2.509	2.507	-2.96100	-2.95886	I->F	07FFFFFF	
GTS4KS1	●○○○○○○○○○○○○○○○	S07	0.488	0.463	0.057	0.054	0.06207	0.05894	I->F	07FFFFFF	
GTS4MU1	●○○○○○○○○○○○○○○○	S07	367.119	367.187	4.079	4.080	-4.18630	-4.18000	Hall	07FFFFFF	0.71074
GTS4MU1	●○○○○○○○○○○○○○○○	S07					-4.18016		I>Bl	---"---	
GTS4KS2	●○○○○○○○○○○○○○○○	S07	10.065	10.076	1.184	1.185	1.28100	1.28243	I->F	07FFFFFF	
GTS4QD21	●○○○○○○○○○○○○○○○	S07	169.066	168.455	2.818	2.808	-3.32055	-3.30875	I->F	07FFFFFF	
GTS4KY2	●○○○○○○○○○○○○○○○	S07	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●○○○○○○○○○○○○○○○	S07	149.272	148.794	2.488	2.480	2.92991	2.92049	I->F	07FFFFFF	
GTS4QD31	●○○○○○○○○○○○○○○○	S07	108.164	107.707	1.803	1.795	2.11995	2.11068	I->F	07FFFFFF	
GTS4QD32	●○○○○○○○○○○○○○○○	S07	161.705	161.260	2.695	2.688	-3.18412	-3.17544	I->F	07FFFFFF	
GTS4KS3	●○○○○○○○○○○○○○○○	S07	9.455	9.459	1.112	1.113	1.20341	1.20385	I->F	07FFFFFF	
GHFSMU1	●○○○○○○○○○○○○○○○	S07	366.323	365.813	4.070	4.065	4.18285	4.17980	Hall	07FFFFFF	0.71014
GHFSMU1	●○○○○○○○○○○○○○○○	S07					4.18227		I>Bl	---"---	
GHFSMU1_0	●○○○○○○○○○○○○○○○	S07	1.091		1.091		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GHFSKS1	●○○○○○○○○○○○○○○○	S07	0.127	0.034	0.015	0.004	0.01618	0.00437	I->F	07FFFFFF	
GHFSQT11	●○○○○○○○○○○○○○○○	S07	102.579	102.382	1.710	1.706	-2.01733	-2.01312	I->F	07FFFFFF	
GHFSQT12	●○○○○○○○○○○○○○○○	S07	211.438	211.250	3.524	3.521	4.95095	4.94688	I->F	07FFFFFF	
GHFSQT13	●○○○○○○○○○○○○○○○	S07	168.188	168.217	2.803	2.804	-3.30512	-3.30582	I->F	07FFFFFF	
GHFSKY1	●○○○○○○○○○○○○○○○	S07	-0.008	0.000	-0.004	0.000	0.00001	0.00000	I->F	07FFFFFF	

SIS-TS-HFS

27. Mar 2014 23:52:57.10

$BP_1 = 9.98$

$BP_2 = 9.5312$

$BP_{34} = 8.04141$

28.3.2014

6

0:00 There is a problem in SIS. We have no beam and this can take hours...

2:15 Beam is back. We open slit to check centering.

Δt S4 : +5mm.

We scale S2-S4

Factor : 0.99921

We scan without ramping.

Δt S4 = +1mm.

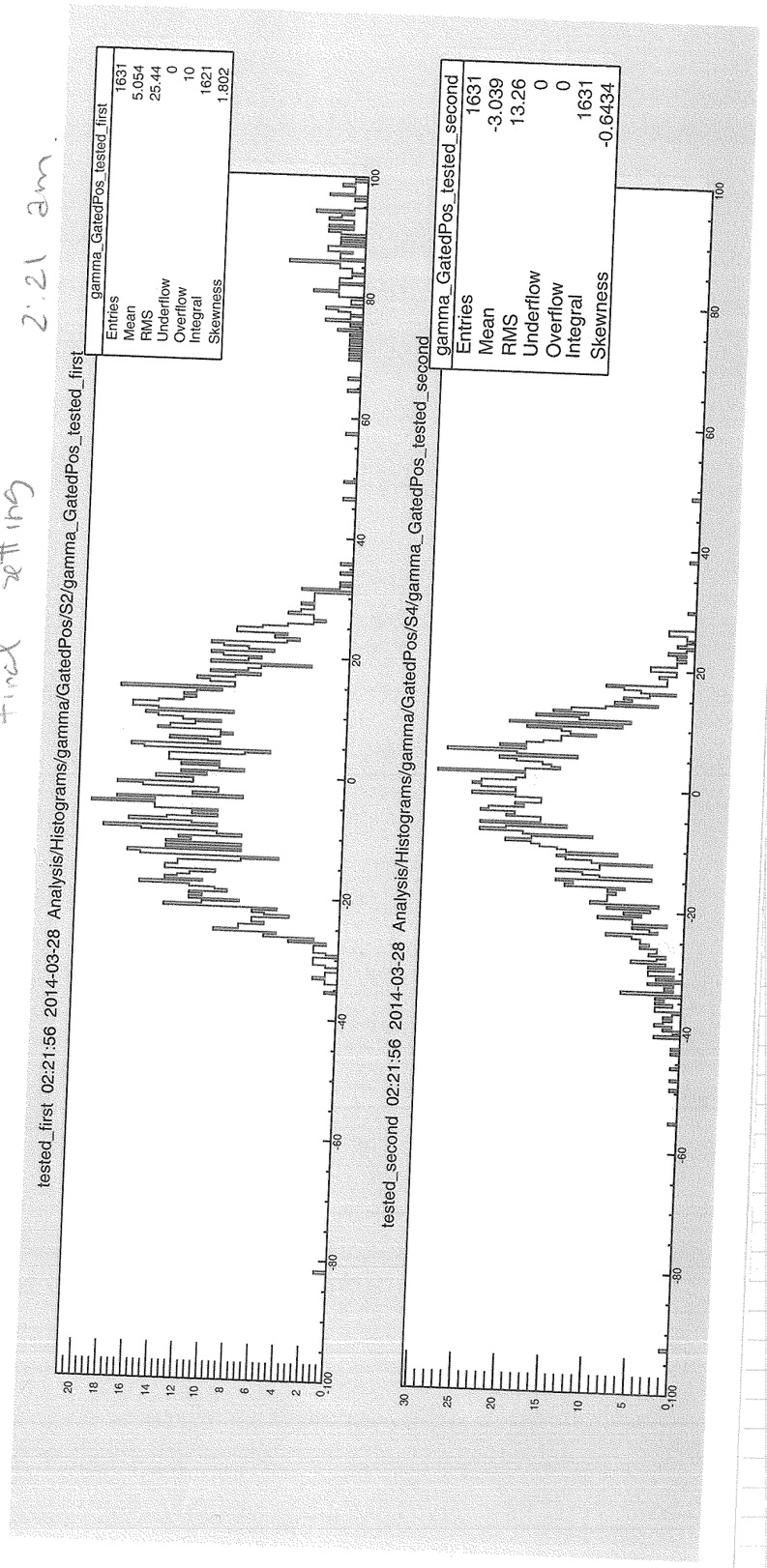
2:35 We have now centered beam
The ratio of ^{62}Fe to total identified is 34%

Intensity : 8×10^8
S2 = 49000
S4 = 3000

Final slits

S1	-7, 7
S2	-20, 20
S3	open
S4	-35, 35

^{62}Fe identified / trigger events = 30%



Final settings 2:21 2m.

54126_31

seetram, ta 2.5g/cm² S1 2g/cm² scz1 3.1mm S2 5g/cm²
Finger 1m. ^{62}Fe centered S2 S4

28. Mar 2014
02:32:52.10

FS

A, ζ	MeV/u	B·ρ [Tm]	bis
$^{86}Kr^{33+}$	11.200	1.2581	GS08BE2F
$^{86}Kr^{33+}$	700.000	11.6315	GTS1ET5
$^{86}Kr^{33+}$	700.000	11.6315	GTS3ED7L
$^{86}Kr^{33+}$	700.000	11.6315	Ende

Magnetwerte/-status für Konsole FS	
Experimentplatz	HFS
Experimentnummer	S430
Beschleuniger	S07
Task	FSMS
Version	FSMS

Name	AccStatus: ● aktiv ○ inaktiv	Acc	$Strom_{Ist}$	$Strom_{Soll}$	$Volt_{Ist}$	$Volt_{Soll}$	$B' \cdot l_{Ist}$	$B' \cdot l_{Soll}$	Mode	Status	Fehler (Bit 0..15)
GTE1KY1	●○○○○○○○○○○○○○○○	S07	-9.622	-9.520	-0.962	-0.952	-0.00439	-0.00434	I->F	07FFFFFF	
GTE1QD11	●○○○○○○○○○○○○○○○	S07	51.690	51.645	1.880	1.878	-1.25495	-1.25386	I->F	07FFFFFF	
GTE1QD12	●○○○○○○○○○○○○○○○	S07	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●○○○○○○○○○○○○○○○	S07	690.765	691.150	6.007	6.010	1.51239	1.51323	I->F	07FFFFFF	
GTS1MU1_0	●●●●●●●●●●●●●●●●	S07	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○○○○○○○○○○○○○○○○	S07	10.691	10.690	1.069	1.069	0.00490	0.00490	I->F	07FFFFFF	
GTS1QD11	○○○○○○○○○○○○○○○○	S07	162.520	162.510	5.417	5.417	6.27051	6.27012	I->F	07FFFFFF	
GTS1QD12	○○○○○○○○○○○○○○○○	S07	179.806	179.880	5.994	5.996	-6.93162	-6.93445	I->F	07FFFFFF	
GTS1MU2	○○○○○○○○○○○○○○○○	S07	319.590	319.660	5.811	5.812	1.53217	1.53250	I->F	07FFFFFF	
GTS2QT11	○○○○○○○○○○○○○○○○	S07	115.378	115.207	1.923	1.920	-2.25720	-2.25358	I->F	07FFFFFF	
GTS2QT12	○○○○○○○○○○○○○○○○	S07	274.905	274.785	4.582	4.580	6.41714	6.41331	I->F	07FFFFFF	
GTS2QT13	○○○○○○○○○○○○○○○○	S07	185.492	185.476	3.092	3.091	-3.63099	-3.63096	I->F	07FFFFFF	
GTS2KS1	●●●●●●●●●●●●●●●●	S07	2.127	2.146	0.250	0.252	0.27073	0.27308	I->F	07FFFFFF	
GTS3MU1	●●●●●●●●●●●●●●●●	S07	455.974	455.547	5.066	5.062	5.29165	5.20868	Hall	07FFFFFF	0.398845
GTS3MU1	●●●●●●●●●●●●●●●●	S07					5.21193		I>Bl	---"---	
GTS3MU1_0	●●●●●●●●●●●●●●●●	S07	0.002		0.002		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3KS1	●●●●●●●●●●●●●●●●	S07	15.168	15.156	1.784	1.783	1.93041	1.92899	I->F	07FFFFFF	
GTS3QD11	●●●●●●●●●●●●●●●●	S07	194.263	194.041	3.238	3.234	-3.80355	-3.79955	I->F	07FFFFFF	
GTS3QD12	●●●●●●●●●●●●●●●●	S07	122.098	122.080	2.035	2.035	2.38978	2.38926	I->F	07FFFFFF	
GTS3QD21	●●●●●●●●●●●●●●●●	S07	176.904	176.642	2.948	2.944	3.46473	3.45980	I->F	07FFFFFF	
GTS3KY1	●●●●●●●●●●●●●●●●	S07	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●●●●●●●●●●●●●●●●	S07	200.012	199.938	3.334	3.332	-3.91824	-3.91715	I->F	07FFFFFF	
GTS3KS2	●●●●●●●●●●●●●●●●	S07	12.400	12.368	1.459	1.455	1.57814	1.57405	I->F	07FFFFFF	
GTS3MU2	●●●●●●●●●●●●●●●●	S07	436.171	434.267	4.846	4.825	-4.98089	-4.96056	Hall	07FFFFFF	0.841554
GTS3MU2	●●●●●●●●●●●●●●●●	S07					-4.98217		I>Bl	---"---	
GTS3KS3	●●●●●●●●●●●●●●●●	S07	0.412	0.393	0.049	0.046	0.05249	0.05007	I->F	07FFFFFF	
GTS3QT31	●●●●●●●●●●●●●●●●	S07	180.346	180.086	3.006	3.001	-3.54309	-3.53817	I->F	07FFFFFF	
GTS3QT32	●●●●●●●●●●●●●●●●	S07	289.755	289.702	4.829	4.828	6.77993	6.77815	I->F	07FFFFFF	
GTS3KY2	●●●●●●●●●●●●●●●●	S07	-0.011	0.000	-0.005	0.000	-0.00001	0.00000	I->F	07FFFFFF	
GTS3QT33	●●●●●●●●●●●●●●●●	S07	192.615	192.398	3.210	3.207	-3.78486	-3.78088	I->F	07FFFFFF	
GTS4QT11	●●●●●●●●●●●●●●●●	S07	162.291	162.279	2.705	2.705	-3.18726	-3.18711	I->F	07FFFFFF	
GTS4KY1	●●●●●●●●●●●●●●●●	S07	0.010	0.000	0.005	0.000	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT12	●●●●●●●●●●●●●●●●	S07	243.995	243.904	4.067	4.065	5.71438	5.71181	I->F	07FFFFFF	
GTS4QT13	●●●●●●●●●●●●●●●●	S07	150.444	150.308	2.507	2.505	-2.95920	-2.95653	I->F	07FFFFFF	
GTS4KS1	●●●●●●●●●●●●●●●●	S07	0.485	0.463	0.057	0.054	0.06174	0.05889	I->F	07FFFFFF	
GTS4MU1	●●●●●●●●●●●●●●●●	S07	366.982	366.898	4.078	4.077	-4.18338	-4.17670	Hall	07FFFFFF	0.71024
GTS4MU1	●●●●●●●●●●●●●●●●	S07					-4.17609		I>Bl	---"---	
GTS4KS2	●●●●●●●●●●●●●●●●	S07	10.057	10.068	1.183	1.185	1.28001	1.28142	I->F	07FFFFFF	
GTS4QD21	●●●●●●●●●●●●●●●●	S07	168.938	168.322	2.816	2.805	-3.31804	-3.30614	I->F	07FFFFFF	
GTS4KY2	●●●●●●●●●●●●●●●●	S07	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●●●●●●●●●●●●●●●●	S07	149.144	148.677	2.486	2.478	2.92739	2.91819	I->F	07FFFFFF	
GTS4QD31	●●●●●●●●●●●●●●●●	S07	108.072	107.622	1.801	1.794	2.11816	2.10901	I->F	07FFFFFF	
GTS4QD32	●●●●●●●●●●●●●●●●	S07	161.559	161.132	2.693	2.686	-3.18124	-3.17293	I->F	07FFFFFF	
GTS4KS3	●●●●●●●●●●●●●●●●	S07	9.450	9.451	1.112	1.112	1.20275	1.20290	I->F	07FFFFFF	
GHFSMU1	●●●●●●●●●●●●●●●●	S07	366.048	365.524	4.067	4.061	4.17993	4.17650	Hall	07FFFFFF	
GHFSMU1	●●●●●●●●●●●●●●●●	S07					4.18164		I>Bl	---"---	0.20964
GHFSMU1_0	●●●●●●●●●●●●●●●●	S07	1.093		1.093		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GHFSKS1	●●●●●●●●●●●●●●●●	S07	0.125	0.034	0.015	0.004	0.01585	0.00436	I->F	07FFFFFF	
GHFSQT11	●●●●●●●●●●●●●●●●	S07	102.487	102.301	1.708	1.705	-2.01553	-2.01153	I->F	07FFFFFF	
GHFSQT12	●●●●●●●●●●●●●●●●	S07	211.274	211.083	3.521	3.518	4.94710	4.94297	I->F	07FFFFFF	
GHFSQT13	●●●●●●●●●●●●●●●●	S07	168.059	168.084	2.801	2.801	-3.30260	-3.30321	I->F	07FFFFFF	
GHFSKY1	●●●●●●●●●●●●●●●●	S07	-0.008	0.000	-0.004	0.000	0.00001	0.00000	I->F	07FFFFFF	

SIS-TS-HFS
2.10 Mar 2014 02:32:52.

$BP_1 = 9.98$

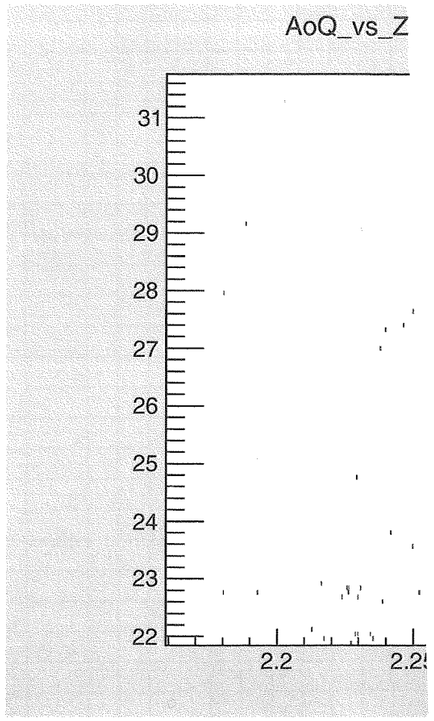
$BP_2 = 9.5312$

$BP_{34} = 8.0444$

2:44 am

We change trigger like this

3
8
9
10 reduction 8



slits changed to

S1 : -9mm , 7mm
S2 : -20,mm, 20mm
S3 : open
S4 : -35 mm, 35mm

From p.4 1072 the Finge setting are
th = 600
V = 800 V.

11:00 Beam off.

28.07.2014 Beam back
22:22 Cave closed, magnets are on
Scale Dipoles by 1
Open slowly S1 slits back to previous settings

TS3 MU1 : 0.84865
TS3 MU2 : 0.84564
TS4 MU1 : 0.71014
HFS MU1 : 0.70955

2:20 Go to 85Br back: Load S426_21
TA found at 25.0 OK. 68.2 111 000
Meltem OK!

TPC21 = -3.1 TPC41 = 4.5
TPC22 = -2.9 TPC42 = 3.2

Scale S2-S4 by -4 mm : f = 0.99937

TPC21 = -2.4 TPC41 = -2.3
TPC22 = +1.5 TPC42 = +0.2

S426_32 — 86Kr 700MeV secTram V S1 dep 2g & S2deg 5g (2.5g BeTA)
SC21 3.1mm TPC21 TPC22, Finger, 85Br setting centered to S4

29. Mar 2014
10:06:40.88

FS

A, ζ	MeV/u	B·ρ [Tm]	bis
86Kr33+	11.200	1.2581	GS08BE2F
86Kr33+	700.000	11.6315	GTS1ET5
86Kr33+	700.000	11.6315	GTS3ED7L
86Kr33+	700.000	11.6315	Ende

Magnetwerte/-status für Konsole FS

Experimentplatz	HFS
Experimentnummer	S430
Beschleuniger	S07
Task	FSMS
Version	FSMS

Name	AccStatus: ● aktiv ○ inaktiv	Acc	Strom$_{ist}$	Strom$_{Soll}$	Volt$_{ist}$	Volt$_{Soll}$	B′·l$_{ist}$	B′·l$_{Soll}$	Mode	Status	Fehler (Bit 0..15)
GTE1KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	-9.720	-9.619	-0.972	-0.962	-0.00443	-0.00439	I->F	07FFFFFF	
GTE1QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	51.690	51.645	1.880	1.878	-1.25495	-1.25386	I->F	07FFFFFF	
GTE1QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	690.028	690.515	6.000	6.004	1.51079	1.51192	I->F	07FFFFFF	
GTS1MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	10.739	10.686	1.074	1.069	0.00492	0.00490	I->F	07FFFFFF	
GTS1QD11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	162.520	162.510	5.417	5.417	6.27051	6.27012	I->F	07FFFFFF	
GTS1QD12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	179.806	179.880	5.994	5.996	-6.93162	-6.93445	I->F	07FFFFFF	
GTS1MU2	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	320.446	320.506	5.826	5.827	1.53624	1.53677	I->F	07FFFFFF	
GTS2QT11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	116.642	116.475	1.944	1.941	-2.28190	-2.27838	I->F	07FFFFFF	
GTS2QT12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	278.036	277.902	4.634	4.632	6.49006	6.48596	I->F	07FFFFFF	
GTS2QT13	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	187.542	187.543	3.126	3.126	-3.67117	-3.67148	I->F	07FFFFFF	
GTS2KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	2.150	2.168	0.253	0.255	0.27370	0.27586	Hall	07FFFFFF	0.90845
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	461.083	460.708	5.123	5.119	5.35230	5.26767	I>Bl	---"---	
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07					5.27158		Dmy	FFFFFFFF	Regler abgeglichen
GTS3MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	0.005		0.005		0.00000		I->F	07FFFFFF	
GTS3KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	15.336	15.325	1.804	1.803	1.95187	1.95049	I->F	07FFFFFF	
GTS3QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	196.442	196.241	3.274	3.271	-3.84627	-3.84270	I->F	07FFFFFF	
GTS3QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	123.472	123.427	2.058	2.057	2.41665	2.41563	I->F	07FFFFFF	
GTS3QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	176.354	176.149	2.939	2.936	3.45395	3.45014	I->F	07FFFFFF	
GTS3KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	199.390	199.303	3.323	3.322	-3.90603	-3.90470	I->F	07FFFFFF	
GTS3KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	12.356	12.325	1.454	1.450	1.57252	1.56862	Hall	07FFFFFF	0.84284
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	434.660	432.830	4.830	4.809	-4.96435	-4.94420	I>Bl	---"---	
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07					-4.96559		I->F	07FFFFFF	
GTS3KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	0.410	0.391	0.048	0.046	0.05216	0.04976	I->F	07FFFFFF	
GTS3QT31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	179.705	179.453	2.995	2.991	-3.53050	-3.52574	I->F	07FFFFFF	
GTS3QT32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	288.748	288.686	4.812	4.811	6.75643	6.75441	I->F	07FFFFFF	
GTS3KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	-0.011	0.000	-0.005	0.000	-0.00001	0.00000	I->F	07FFFFFF	
GTS3QT33	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	191.974	191.743	3.200	3.196	-3.77227	-3.76803	I->F	07FFFFFF	
GTS4QT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	147.624	147.434	2.460	2.457	-2.89934	-2.89558	I->F	07FFFFFF	
GTS4KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	0.010	0.000	0.005	0.000	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	221.564	221.472	3.693	3.691	5.19055	5.18856	I->F	07FFFFFF	
GTS4QT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	136.711	136.574	2.279	2.276	-2.68936	-2.68657	I->F	07FFFFFF	
GTS4KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	0.449	0.425	0.053	0.050	0.05712	0.05410	Hall	07FFFFFF	0.64534
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	333.363	333.378	3.704	3.704	-3.80090	-3.79412	I>Bl	---"---	
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07					-3.79423		I->F	07FFFFFF	
GTS4KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	9.142	9.147	1.075	1.076	1.16346	1.16416	I->F	07FFFFFF	
GTS4QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	153.557	152.953	2.559	2.549	-3.01611	-3.00426	I->F	07FFFFFF	
GTS4KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	135.557	135.081	2.259	2.251	2.66096	2.65147	I->F	07FFFFFF	
GTS4QD31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	98.202	97.767	1.637	1.629	1.92500	1.91613	I->F	07FFFFFF	
GTS4QD32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	146.800	146.353	2.447	2.439	-2.89116	-2.88233	I->F	07FFFFFF	
GTS4KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	8.584	8.586	1.010	1.010	1.09248	1.09272	Hall	07FFFFFF	0.64485
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	332.456	332.123	3.694	3.690	3.79793	3.79447	I>Bl	---"---	
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07					3.80013		Dmy	FFFFFFFF	Regler abgeglichen
GHFSMU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	1.098		1.098		0.00000		I->F	07FFFFFF	
GHFSKS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	0.132	0.034	0.016	0.004	0.01684	0.00433	I->F	07FFFFFF	
GHFSQT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	93.112	92.903	1.552	1.548	-1.83164	-1.82720	I->F	07FFFFFF	
GHFSQT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	191.882	191.698	3.198	3.195	4.49345	4.48960	I->F	07FFFFFF	
GHFSQT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	152.696	152.711	2.545	2.545	-3.00084	-3.00112	I->F	07FFFFFF	
GHFSKY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S07	-0.007	0.000	-0.003	0.000	0.00001	0.00000	I->F	07FFFFFF	

SIS–TS–HFS
29 Mar 2014 10:06:40.88

10:34 An expert arrived to check the source
→ beam is off : expected waiting time ≈ 60 min

Took beam until 14:00

21.00 we scale by 1. TS3MU1 is not with appropiate value.
We putit by hand and scale by 1.
I get a yellow error message. we scale again and it worked.
Open S1 slits.

21:30 We have the beam centered on Lycca DSSD and start data taking

ESR requests every one minute causing problems for every sixth spill: Intensity of this spill is about 50% higher and that spill is ~2s shorter.

30.03.2014

08:32 Magnet problem, no beam

14:25 beam off

10.3.2014

21:10 Magnets on. Scale by -1.
Magnets are ok. we open slits and open file.

22:30 Since latest 22⁰⁰ we have 14s cycles due to parallel measurements on another machine. This costs 15% of our statistics. Additional (1) to the higher intensity when ESR requests.

22:40 Brought this problem to the attention of the operators. They were at this moment discussing issues of the other experiment and it was not even measuring. We have 2s ramping too now.

S1 slits-Xspace