19.03.2014

6^{00} ~~The~~ Cave-M requested 2h extension of their beam time!
The accelerator shift said that they should start work on our experiment from 7^{00}. At the ~~meeting on~~ noon meeting on 18th it was agreed that our experiment should start at 6^{00}
Hence Cave-M ~~was~~ used 3h of our time.

9^{00} Starting tune of $^{86}Kr^{33+}$, 700 MeV/u

9^{30} The pulse-control is down, SIS is not active, ~~there~~ we have problem activating the magnets for FRS, most likely ~~the~~ the program crashes when a machine ~~that~~ does not exist!

10:00 One of the magnets was in manual control. Not all the magnets are on yet. The problem now is that S2 is in interlock; It looks not closed the area.

16:20 status: SEETram in, current grid 01, 02 in, slits S1 and S3 are closed, S4 degrader out, S4 slits [35 35], SC2 1.3.1 mm

drive position for SC21
GTS3ESA_5 : 247.0 mm

10:25 S2 is still open. Radiation safety opened it and is not closed yet.
Plamen and Christian are going to the main control room to check the status of the beam.
... we wait..

10:40 We will not have beam for around 1h, because of service in the transfer canal.

13:00 Still no beam.

22:50 Now we have beam. We are centering the beam.

22:45 Beam adjusted on ~~TA~~. (no printer available)

We load settings 5431_12 only from TA to S4

Current grids taken out.

$B\rho_{12}$: 13.0405 } old from settings pag. 434
$B\rho_{21}$: 12.3327

we scale: TA-S2: $\frac{10.6586}{13.0405}$ = 0.817346

S2-S4 = $\frac{10.3698}{12.3327}$ = 0.8408378

we put SC01 (and the pocket)

23:20 We have 4s spills. Intensity ≈ 10.000 and put SC01 out.
S1 slits ±35

we don't see S2. SC01 in again.

23:45 Voltages of SC21 adjusted
SC21 R : 1600V } Amplitude ≈ 1.1 V
SC21 L 1900V

20.03.2014

0:00
TPC21x = −1.0
TPC22x = +1.5
TPC41x = −15.4
TPC42x = −14.1

Scale by 14.5mm S2-S4

→ Musics gains adjusted. We have the maximum gain now.

TPC 41 = +2.2
TPC 42 = +2.9

Scale by −2.5mm S2-S4. Factor = 0.99961

TPC41 = −0.5
TPC42 = +0.08 ok.

Save settings under 5426_14

→ TOF Sci 21 − 41 offsets changed (for TACs):
for left-left: all delays out = 0ns delay
right-right: 20ns delay
(delay values wrong, set in histogram for ll, rr, rl)

Close slits −2,0mm +2.0mm
TPC 41 = −2.6 ⇒ offset for calibration. OK.
TPC 42 = −1.2

Open slits S4 (41) 1.5mm ⇒ Scale by 1.5mm
(42) 1.2mm
S41 +0.3 OK.
S42 −0.3

Close slits S2 (21) − 0.6 ⇒ offset corrected
(22) + 1,1mm

Open slits S2 (21) − 0.5
(22) + 0.3

TPC41 counts the double of TPC42

5426 - 14

SEETRAM, SC21 3.1 mm. no matter

20. Mar 2014
00:22:55.80

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	S426
Beschleuniger	S08
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	●○○○○○○○○○○○○○○○	S08	8.640	8.770	0.864	0.877	0.00396	0.00402	I->F	07FFFFFF	
GTE1QD11	●○○○○○○○○○○○○○○○	S08	51.690	51.645	1.880	1.878	-1.25495	-1.25386	I->F	07FFFFFF	
GTE1QD12	●○○○○○○○○○○○○○○○	S08	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●○○○○○○○○○○○○○○○	S08	680.236	680.752	5.915	5.920	1.48946	1.49066	I->F	07FFFFFF	
GTS1MU1_0	●●●●●●●●●●●●●●●●	S08	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○○○○○○○○○○○○○○○○	S08	0.778	0.706	0.078	0.071	0.00037	0.00034	I->F	07FFFFFF	
GTS1QD11	○○○○○○○○○○○○○○○○	S08	162.447	162.510	5.415	5.417	6.26771	6.27012	I->F	07FFFFFF	
GTS1QD12	○○○○○○○○○○○○○○○○	S08	171.310	171.300	5.710	5.710	-6.60704	-6.60668	I->F	07FFFFFF	
GTS1MU2	○○○○○○○○○○○○○○○○	S08	322.947	322.942	5.872	5.872	1.54814	1.54837	I->F	07FFFFFF	
GTS2QT11	○○○○○○○○○○○○○○○○	S08	123.399	123.221	2.057	2.054	-2.41401	-2.41032	I->F	07FFFFFF	
GTS2QT12	○○○○○○○○○○○○○○○○	S08	294.058	293.953	4.901	4.899	6.86285	6.85995	I->F	07FFFFFF	
GTS2QT13	○○○○○○○○○○○○○○○○	S08	198.401	198.415	3.307	3.307	-3.88397	-3.88462	I->F	07FFFFFF	
GTS2KS1	●●●●●●●●●●●●●●●●	S08	2.283	2.297	0.269	0.270	0.29054	0.29238	I->F	07FFFFFF	
GTS3MU1	●○○○○○○○○○○○○○○○	S08	487.863	487.396	5.421	5.416	5.66432	5.57251	Hall	07FFFFFF	
GTS3MU1	●○○○○○○○○○○○○○○○	S08					5.57778		I>Bl	---"---	0.96155
GTS3MU1_0	●●●●●●●●●●●●●●●●	S08	0.002		0.002		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3KS1	●○○○○○○○○○○○○○○○	S08	16.229	16.211	1.909	1.907	2.06544	2.06321	I->F	07FFFFFF	
GTS3QD11	●○○○○○○○○○○○○○○○	S08	207.868	207.618	3.464	3.460	-4.07029	-4.06580	I->F	07FFFFFF	
GTS3QD12	●○○○○○○○○○○○○○○○	S08	130.577	130.554	2.176	2.176	2.55566	2.55518	I->F	07FFFFFF	
GTS3QD21	●○○○○○○○○○○○○○○○	S08	198.694	198.436	3.312	3.307	3.89217	3.88746	I->F	07FFFFFF	
GTS3KY1	●○○○○○○○○○○○○○○○	S08	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●○○○○○○○○○○○○○○○	S08	224.677	224.599	3.745	3.743	-4.40204	-4.40090	I->F	07FFFFFF	
GTS3KS2	●○○○○○○○○○○○○○○○	S08	13.925	13.894	1.638	1.635	1.77227	1.76835	I->F	07FFFFFF	
GTS3MU2	●○○○○○○○○○○○○○○○	S08	490.033	488.081	5.445	5.423	-5.59275	-5.57251	Hall	07FFFFFF	
GTS3MU2	●○○○○○○○○○○○○○○○	S08					-5.59509		I>Bl	---"---	0.94954
GTS3KS3	●○○○○○○○○○○○○○○○	S08	0.457	0.438	0.054	0.051	0.05811	0.05569	I->F	07FFFFFF	
GTS3QT31	●○○○○○○○○○○○○○○○	S08	202.576	202.342	3.376	3.372	-3.97964	-3.97535	I->F	07FFFFFF	
GTS3QT32	●○○○○○○○○○○○○○○○	S08	325.553	325.497	5.426	5.425	7.61379	7.61344	I->F	07FFFFFF	
GTS3KY2	●○○○○○○○○○○○○○○○	S08	-0.011	0.000	-0.005	0.000	-0.00001	0.00000	I->F	07FFFFFF	
GTS3QT33	●○○○○○○○○○○○○○○○	S08	216.456	216.201	3.608	3.603	-4.25299	-4.24833	I->F	07FFFFFF	
GTS4QT11	●○○○○○○○○○○○○○○○	S08	210.541	210.387	3.509	3.506	-4.13444	-4.13176	I->F	07FFFFFF	
GTS4KY1	●○○○○○○○○○○○○○○○	S08	0.010	0.000	0.005	0.000	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT12	●○○○○○○○○○○○○○○○	S08	316.489	316.388	5.275	5.273	7.40601	7.40425	I->F	07FFFFFF	
GTS4QT13	●○○○○○○○○○○○○○○○	S08	195.013	194.913	3.250	3.249	-3.83493	-3.83328	I->F	07FFFFFF	
GTS4KS1	●○○○○○○○○○○○○○○○	S08	0.628	0.604	0.074	0.071	0.07990	0.07686	I->F	07FFFFFF	
GTS4MU1	●○○○○○○○○○○○○○○○	S08	475.530	475.569	5.284	5.284	-5.42186	-5.41490	Hall	07FFFFFF	
GTS4MU1	●○○○○○○○○○○○○○○○	S08					-5.41459		I>Bl	---"---	0.92044
GTS4KS2	●○○○○○○○○○○○○○○○	S08	13.048	13.055	1.535	1.536	1.66068	1.66150	I->F	07FFFFFF	
GTS4QD21	●○○○○○○○○○○○○○○○	S08	218.836	218.240	3.647	3.637	-4.29776	-4.28664	I->F	07FFFFFF	
GTS4KY2	●○○○○○○○○○○○○○○○	S08	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●○○○○○○○○○○○○○○○	S08	193.237	192.780	3.221	3.213	3.79221	3.78360	I->F	07FFFFFF	
GTS4QD31	●○○○○○○○○○○○○○○○	S08	139.988	139.550	2.333	2.326	2.74324	2.73452	I->F	07FFFFFF	
GTS4QD32	●○○○○○○○○○○○○○○○	S08	209.424	209.014	3.490	3.484	-4.12153	-4.11381	I->F	07FFFFFF	
GTS4KS3	●○○○○○○○○○○○○○○○	S08	12.249	12.251	1.441	1.441	1.55899	1.55922	I->F	07FFFFFF	
GHFSMU1	●○○○○○○○○○○○○○○○	S08	474.432	474.015	5.271	5.267	5.41862	5.41490	Hall	07FFFFFF	
GHFSMU1	●○○○○○○○○○○○○○○○	S08					5.41916		I>Bl	---"---	0.91994
GHFSMU1_0	●○○○○○○○○○○○○○○○	S08	1.093		1.093		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GHFSKS1	●○○○○○○○○○○○○○○○	S08	0.130	0.046	0.015	0.005	0.01651	0.00580	I->F	07FFFFFF	
GHFSQT11	●○○○○○○○○○○○○○○○	S08	132.865	132.670	2.214	2.211	-2.61162	-2.60761	I->F	07FFFFFF	
GHFSQT12	●○○○○○○○○○○○○○○○	S08	274.062	273.898	4.568	4.565	6.41310	6.40832	I->F	07FFFFFF	
GHFSQT13	●○○○○○○○○○○○○○○○	S08	217.920	217.959	3.632	3.633	-4.28180	-4.28288	I->F	07FFFFFF	
GHFSKY1	●○○○○○○○○○○○○○○○	S08	-0.008	0.000	-0.004	0.000	0.00001	0.00000	I->F	07FFFFFF	

SIS-TS-HFS . Mar 2014 00:22:55.80

Theory BS:

BS_{12} = 10.6586 Tm

BS_{24} = 10.3698 Tm

(not corrected by the S2-S4 scaling)

5426_15 - ref. Slightly corrected as comp. to S426_14. 5

Seetram SC21 3.1mm no matter

20. Mar 2014
01:16:24.76

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	S426
Beschleuniger	S08
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	●○○○○○○○○○○○○○○○	S08	8.591	8.770	0.859	0.877	0.00394	0.00402	I->F	07FFFFFF	
GTE1QD11	●○○○○○○○○○○○○○○○	S08	51.690	51.645	1.880	1.878	-1.25495	-1.25386	I->F	07FFFFFF	
GTE1QD12	●○○○○○○○○○○○○○○○	S08	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●○○○○○○○○○○○○○○○	S08	680.447	680.752	5.917	5.920	1.48992	1.49066	I->F	07FFFFFF	
GTS1MU1_0	●●●●●●●●●●●●●●●●	S08	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○○○○○○○○○○○○○○○○	S08	0.778	0.706	0.078	0.071	0.00037	0.00034	I->F	07FFFFFF	
GTS1QD11	○○○○○○○○○○○○○○○○	S08	162.447	162.510	5.415	5.417	6.26771	6.27012	I->F	07FFFFFF	
GTS1QD12	○○○○○○○○○○○○○○○○	S08	171.236	171.300	5.708	5.710	-6.60424	-6.60668	I->F	07FFFFFF	
GTS1MU2	○○○○○○○○○○○○○○○○	S08	322.930	322.942	5.871	5.872	1.54806	1.54837	I->F	07FFFFFF	
GTS2QT11	○○○○○○○○○○○○○○○○	S08	123.399	123.221	2.057	2.054	-2.41401	-2.41032	I->F	07FFFFFF	
GTS2QT12	○○○○○○○○○○○○○○○○	S08	294.076	293.953	4.901	4.899	6.86327	6.85995	I->F	07FFFFFF	
GTS2QT13	○○○○○○○○○○○○○○○○	S08	198.419	198.415	3.307	3.307	-3.88433	-3.88462	I->F	07FFFFFF	
GTS2KS1	●●●●●●●●●●●●●●●●	S08	2.285	2.297	0.269	0.270	0.29087	0.29238	I->F	07FFFFFF	
GTS3MU1	●○○○○○○○○○○○○○○○	S08	487.780	487.396	5.420	5.416	5.66463	5.57251	Hall	07FFFFFF	
GTS3MU1	●○○○○○○○○○○○○○○○	S08					5.57778		I>Bl	---"---	0.96175
GTS3MU1_0	●●●●●●●●●●●●●●●●	S08	0.005		0.005		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3KS1	●○○○○○○○○○○○○○○○	S08	16.221	16.211	1.908	1.907	2.06445	2.06321	I->F	07FFFFFF	
GTS3QD11	●○○○○○○○○○○○○○○○	S08	207.831	207.618	3.464	3.460	-4.06957	-4.06580	I->F	07FFFFFF	
GTS3QD12	●○○○○○○○○○○○○○○○	S08	130.577	130.554	2.176	2.176	2.55566	2.55518	I->F	07FFFFFF	
GTS3QD21	●○○○○○○○○○○○○○○○	S08	198.694	198.436	3.312	3.307	3.89217	3.88746	I->F	07FFFFFF	
GTS3KY1	●○○○○○○○○○○○○○○○	S08	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●○○○○○○○○○○○○○○○	S08	224.677	224.599	3.745	3.743	-4.40204	-4.40090	I->F	07FFFFFF	
GTS3KS2	●○○○○○○○○○○○○○○○	S08	13.920	13.894	1.638	1.635	1.77161	1.76835	I->F	07FFFFFF	
GTS3MU2	●○○○○○○○○○○○○○○○	S08	490.088	488.081	5.445	5.423	-5.59275	-5.57251	Hall	07FFFFFF	
GTS3MU2	●○○○○○○○○○○○○○○○	S08					-5.59509		I>Bl	---"---	0.94944
GTS3KS3	●○○○○○○○○○○○○○○○	S08	0.457	0.438	0.054	0.051	0.05811	0.05569	I->F	07FFFFFF	
GTS3QT31	●○○○○○○○○○○○○○○○	S08	202.576	202.342	3.376	3.372	-3.97964	-3.97535	I->F	07FFFFFF	
GTS3QT32	●○○○○○○○○○○○○○○○	S08	325.553	325.497	5.426	5.425	7.61379	7.61344	I->F	07FFFFFF	
GTS3KY2	●○○○○○○○○○○○○○○○	S08	-0.011	0.000	-0.005	0.000	-0.00001	0.00000	I->F	07FFFFFF	
GTS3QT33	●○○○○○○○○○○○○○○○	S08	216.456	216.201	3.608	3.603	-4.25299	-4.24833	I->F	07FFFFFF	
GTS4QT11	●○○○○○○○○○○○○○○○	S08	210.504	210.337	3.508	3.506	-4.13373	-4.13078	I->F	07FFFFFF	
GTS4KY1	●○○○○○○○○○○○○○○○	S08	0.010	0.000	0.005	0.000	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT12	●○○○○○○○○○○○○○○○	S08	316.379	316.313	5.273	5.272	7.40345	7.40249	I->F	07FFFFFF	
GTS4QT13	●○○○○○○○○○○○○○○○	S08	194.958	194.867	3.249	3.248	-3.83386	-3.83237	I->F	07FFFFFF	
GTS4KS1	●○○○○○○○○○○○○○○○	S08	0.628	0.604	0.074	0.071	0.07990	0.07684	I->F	07FFFFFF	
GTS4MU1	●○○○○○○○○○○○○○○○	S08	475.393	475.456	5.282	5.283	-5.42186	-5.41362	Hall	07FFFFFF	
GTS4MU1	●○○○○○○○○○○○○○○○	S08					-5.41334		I>Bl	---"---	0.92034
GTS4KS2	●○○○○○○○○○○○○○○○	S08	13.046	13.052	1.535	1.535	1.66035	1.66111	I->F	07FFFFFF	
GTS4QD21	●○○○○○○○○○○○○○○○	S08	218.818	218.189	3.647	3.636	-4.29740	-4.28562	I->F	07FFFFFF	
GTS4KY2	●○○○○○○○○○○○○○○○	S08	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●○○○○○○○○○○○○○○○	S08	193.219	192.734	3.220	3.212	3.79186	3.78270	I->F	07FFFFFF	
GTS4QD31	●○○○○○○○○○○○○○○○	S08	139.952	139.517	2.333	2.325	2.74253	2.73387	I->F	07FFFFFF	
GTS4QD32	●○○○○○○○○○○○○○○○	S08	209.369	208.964	3.489	3.483	-4.12045	-4.11284	I->F	07FFFFFF	
GTS4KS3	●○○○○○○○○○○○○○○○	S08	12.247	12.248	1.441	1.441	1.55866	1.55885	I->F	07FFFFFF	
GHFSMU1	●○○○○○○○○○○○○○○○	S08	474.129	473.902	5.268	5.266	5.41753	5.41362	Hall	07FFFFFF	
GHFSMU1	●○○○○○○○○○○○○○○○	S08					5.41510		I>Bl	---"---	0.91974
GHFSMU1_0	●○○○○○○○○○○○○○○○	S08	1.091		1.091		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GHFSKS1	●○○○○○○○○○○○○○○○	S08	0.130	0.046	0.015	0.005	0.01651	0.00579	I->F	07FFFFFF	
GHFSQT11	●○○○○○○○○○○○○○○○	S08	132.829	132.638	2.214	2.211	-2.61091	-2.60699	I->F	07FFFFFF	
GHFSQT12	●○○○○○○○○○○○○○○○	S08	273.989	273.833	4.566	4.564	6.41139	6.40680	I->F	07FFFFFF	
GHFSQT13	●○○○○○○○○○○○○○○○	S08	217.866	217.907	3.631	3.632	-4.28073	-4.28187	I->F	07FFFFFF	
GHFSKY1	●○○○○○○○○○○○○○○○	S08	-0.008	0.000	-0.004	0.000	0.00001	0.00000	I->F	07FFFFFF	

SIS-TS-HFS . Mar 2014 01:16:24.76

BS_{12} = 10.6586 Tm

BS_{34} = 10.3850 Tm (after correcting for SC21 thickness) = not absolute!

ρ_1 = 11,0825
ρ_2 = 11,2262
ρ_3 = 11,2839
ρ_4 = 11,2912

0.1:30

Defocuse the beam at S2 for the finger

TS3QD21 was 3.3~~12~~V to 0

TS3QD22 was 3.745 V to 0

1:45

Voltages of SC21 & SC41

SC21L = 2100 V } dynodes put on as well.

SC21R = 1600 V

SC41L = 1400 V

SC41R = 1300 V

02:00

Focus again. Start TOF1.file.

To go to minimum matter

TA-S2 = $\frac{10.6586}{10.6586} = 1$

S2-S4 = $\frac{10.4871}{10.3850} = 1.00983$

2:25 Remove sc21 to measure minmatter.
↳ it doesn't move.

As we didn't manage to move it we will not measure minimum matter until tomorrow

No scaling done

~~S1~~-S2 = $\frac{10.0616}{10.6586} = 0.9439$

S2-S4 = $\frac{9.7576}{10.3850} = 0.939585$

-Voltage on the Finger set to 320V

-we put is S1 digrader

| dialed 2075 mg/cm² |

TS3ED202 = -31.25mm
V1 = -252.7mm
wedge = 1

TPC21 = -1.2 TPC41 = -10

TPC22 = -0.2 TPC42 = -9.6

From S2-S4 there was a wrong scaling factor.
we go back. Scale by: 1.0643 to get back.

We scale now assuming 3.1mm for SC21

S2-S4 = $\frac{9.7576}{10.3698} = 0.940996$

TPC 21 = -1. TPC 41 = 1.0 mm

TPC 22 = 0 TPC 42 = 0.5 mm.

SC21 ladder doesn't move ☹

S3 slits had also a problem ☹

S426-16 Seetram, S1 deg 2g/cm², SC21 3.1 mm
centered S2, S4

20. Mar 2014
03:17:19.83

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	S426
Beschleuniger	S08
Task	FSMS
Version	FSMS

Name	AccStatus: ● aktiv ○ inaktiv	Acc	$Strom_{Ist}$	$Strom_{Soll}$	$Volt_{Ist}$	$Volt_{Soll}$	$B' \cdot I_{Ist}$	$B' \cdot I_{Soll}$	Mode	Status	Fehler (Bit 0..15)
GTE1KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	8.591	8.770	0.859	0.877	0.00394	0.00402	I->F	07FFFFFF	
GTE1QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	51.690	51.645	1.880	1.878	-1.25495	-1.25386	I->F	07FFFFFF	
GTE1QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	679.991	680.763	5.913	5.920	1.48893	1.49061	I->F	07FFFFFF	
GTS1MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.778	0.706	0.078	0.071	0.00037	0.00034	I->F	07FFFFFF	
GTS1QD11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	162.447	162.510	5.415	5.417	6.26771	6.27012	I->F	07FFFFFF	
GTS1QD12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	171.236	171.300	5.708	5.710	-6.60424	-6.60668	I->F	07FFFFFF	
GTS1MU2	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	322.964	322.942	5.872	5.872	1.54822	1.54837	I->F	07FFFFFF	
GTS2QT11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	123.380	123.221	2.056	2.054	-2.41365	-2.41032	I->F	07FFFFFF	
GTS2QT12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	294.076	293.953	4.901	4.899	6.86327	6.85995	I->F	07FFFFFF	
GTS2QT13	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	198.419	198.415	3.307	3.307	-3.88433	-3.88462	I->F	07FFFFFF	
GTS2KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	2.283	2.297	0.269	0.270	0.29054	0.29238	I->F	07FFFFFF	
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	487.725	487.396	5.419	5.416	5.66432	5.57251	Hall	07FFFFFF	
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					5.57778		I>Bl	---"---	0.96165
GTS3MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.002		0.002		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	16.210	16.211	1.907	1.907	2.06313	2.06321	I->F	07FFFFFF	
GTS3QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	207.831	207.618	3.464	3.460	-4.06957	-4.06580	I->F	07FFFFFF	
GTS3QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	130.577	130.554	2.176	2.176	2.55566	2.55518	I->F	07FFFFFF	
GTS3QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	187.671	187.404	3.128	3.123	3.67591	3.67097	I->F	07FFFFFF	
GTS3KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	212.226	212.089	3.537	3.535	-4.15779	-4.15550	I->F	07FFFFFF	
GTS3KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	13.142	13.115	1.546	1.543	1.67256	1.66915	I->F	07FFFFFF	
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	462.429	460.571	5.138	5.117	-5.27818	-5.25989	Hall	07FFFFFF	
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					-5.28199		I>Bl	---"---	
GTS3KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.433	0.413	0.051	0.049	0.05514	0.05257	I->F	07FFFFFF	0.89604
GTS3QT31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	191.223	190.987	3.187	3.183	-3.75670	-3.75233	I->F	07FFFFFF	
GTS3QT32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	307.224	307.178	5.120	5.120	7.18720	7.18633	I->F	07FFFFFF	
GTS3KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS3QT33	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	204.297	204.063	3.405	3.401	-4.01427	-4.01000	I->F	07FFFFFF	
GTS4QT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	198.090	197.913	3.301	3.299	-3.89004	-3.88688	I->F	07FFFFFF	
GTS4KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	297.702	297.603	4.962	4.960	6.96792	6.96541	I->F	07FFFFFF	
GTS4QT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	183.477	183.353	3.058	3.056	-3.60829	-3.60609	I->F	07FFFFFF	
GTS4KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.591	0.568	0.070	0.067	0.07528	0.07230	I->F	07FFFFFF	
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	447.349	447.361	4.971	4.971	-5.10074	-5.09397	Hall	07FFFFFF	0.86594
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					-5.09300		I>Bl	---"---	
GTS4KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	12.273	12.281	1.444	1.445	1.56196	1.56303	I->F	07FFFFFF	
GTS4QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	205.872	205.304	3.431	3.422	-4.04318	-4.03258	I->F	07FFFFFF	
GTS4KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	181.811	181.352	3.030	3.023	3.56810	3.55935	I->F	07FFFFFF	
GTS4QD31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	131.730	131.281	2.196	2.188	2.58144	2.57245	I->F	07FFFFFF	
GTS4QD32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	197.009	196.599	3.283	3.277	-3.87775	-3.87000	I->F	07FFFFFF	
GTS4KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	11.520	11.525	1.355	1.356	1.46621	1.46681	I->F	07FFFFFF	
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	445.976	445.818	4.955	4.954	5.09709	5.09360	Hall	07FFFFFF	0.86535
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					5.09523		I>Bl	---"---	
GHFSMU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	1.101		1.101		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GHFSKS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.127	0.043	0.015	0.005	0.01618	0.00545	I->F	07FFFFFF	
GHFSQT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	124.973	124.798	2.083	2.080	-2.45674	-2.45306	I->F	07FFFFFF	
GHFSQT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	257.729	257.621	4.295	4.294	6.03195	6.02852	I->F	07FFFFFF	
GHFSQT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	204.993	205.031	3.417	3.417	-4.02799	-4.02905	I->F	07FFFFFF	
GHFSKY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.008	0.000	-0.004	0.000	0.00001	0.00000	I->F	07FFFFFF	

$B\rho_1 = 10.6586$

$B\rho_2 = 10.0616$ Tm

$B\rho_{34} = 9.7576$

TA-S1 = $\frac{10.6586}{10.6586} = 1$

S1-S2 = $\frac{10.6586}{10.0616} = 1.05933$

S2-S4 = $\frac{8.7657}{9.7576} = 0.89835$

We put | S2 degrader. Disk 4869 mg/cm² | offset: -131 mg/cm²

TS3ED7VO : -298.0 mm
VU : -298.0 mm
DS : 90 grad
DP : in
LS : -107.7 mm

TPC21 = 0.0
TPC22 = +0.7

TPC41 = 0.0
TPC42 = -0.3

- S2 degrader out

5426_17

seetiam, S2 dig 5g/cm², SC21 3.1mm centred S2, S4

20. Mar 2014
03:37:41.07

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	S426
Beschleuniger	S08
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	●○○○○○○○○○○○○○○○	S08	8.591	8.770	0.859	0.877	0.00394	0.00402	I->F	07FFFFFF	
GTE1QD11	●○○○○○○○○○○○○○○○	S08	51.690	51.645	1.880	1.878	-1.25495	-1.25386	I->F	07FFFFFF	
GTE1QD12	●○○○○○○○○○○○○○○○	S08	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●○○○○○○○○○○○○○○○	S08	680.447	680.763	5.917	5.920	1.48992	1.49061	I->F	07FFFFFF	
GTS1MU1_0	●●●●●●●●●●●●●●●●	S08	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○○○○○○○○○○○○○○○○	S08	0.778	0.706	0.078	0.071	0.00037	0.00034	I->F	07FFFFFF	0
GTS1QD11	○○○○○○○○○○○○○○○○	S08	162.520	162.510	5.417	5.417	6.27051	6.27012	I->F	07FFFFFF	
GTS1QD12	○○○○○○○○○○○○○○○○	S08	171.236	171.300	5.708	5.710	-6.60424	-6.60668	I->F	07FFFFFF	
GTS1MU2	○○○○○○○○○○○○○○○○	S08	322.947	322.942	5.872	5.872	1.54814	1.54837	I->F	07FFFFFF	
GTS2QT11	○○○○○○○○○○○○○○○○	S08	123.380	123.221	2.056	2.054	-2.41365	-2.41032	I->F	07FFFFFF	
GTS2QT12	○○○○○○○○○○○○○○○○	S08	294.058	293.953	4.901	4.899	6.86285	6.85995	I->F	07FFFFFF	
GTS2QT13	○○○○○○○○○○○○○○○○	S08	198.419	198.415	3.307	3.307	-3.88433	-3.88462	I->F	07FFFFFF	
GTS2KS1	●●●●●●●●●●●●●●●●	S08	2.283	2.297	0.269	0.270	0.29054	0.29238	I->F	07FFFFFF	
GTS3MU1	●●●●●●●●●●●●●●●●	S08	487.780	487.396	5.420	5.416	5.66432	5.57251	Hall	07FFFFFF	
GTS3MU1	●●●●●●●●●●●●●●●●	S08					5.57684		I>Bl	---"---	0.96175
GTS3MU1_0	●●●●●●●●●●●●●●●●	S08	0.002		0.002		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3KS1	●●●●●●●●●●●●●●●●	S08	16.229	16.211	1.909	1.907	2.06544	2.06321	I->F	07FFFFFF	
GTS3QD11	●●●●●●●●●●●●●●●●	S08	207.813	207.618	3.464	3.460	-4.06922	-4.06580	I->F	07FFFFFF	
GTS3QD12	●●●●●●●●●●●●●●●●	S08	130.577	130.554	2.176	2.176	2.55566	2.55518	I->F	07FFFFFF	
GTS3QD21	●●●●●●●●●●●●●●●●	S08	198.749	198.497	3.312	3.308	3.89325	3.88866	I->F	07FFFFFF	
GTS3KY1	●●●●●●●●●●●●●●●●	S08	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●●●●●●●●●●●●●●●●	S08	224.732	224.651	3.746	3.744	-4.40312	-4.40193	I->F	07FFFFFF	
GTS3KS2	●●●●●●●●●●●●●●●●	S08	13.917	13.892	1.637	1.634	1.77128	1.76813	I->F	07FFFFFF	
GTS3MU2	●●●●●●●●●●●●●●●●	S08	489.978	488.019	5.444	5.422	-5.59203	-5.57180	Hall	07FFFFFF	
GTS3MU2	●●●●●●●●●●●●●●●●	S08					-5.59477		I>Bl	---"---	0.99434
GTS3KS3	●●●●●●●●●●●●●●●●	S08	0.457	0.438	0.054	0.051	0.05811	0.05569	I->F	07FFFFFF	
GTS3QT31	●●●●●●●●●●●●●●●●	S08	202.557	202.316	3.376	3.372	-3.97928	-3.97484	I->F	07FFFFFF	
GTS3QT32	●●●●●●●●●●●●●●●●	S08	325.517	325.455	5.425	5.424	7.61294	7.61247	I->F	07FFFFFF	
GTS3KY2	●●●●●●●●●●●●●●●●	S08	-0.011	0.000	-0.005	0.000	-0.00001	0.00000	I->F	07FFFFFF	
GTS3QT33	●●●●●●●●●●●●●●●●	S08	216.437	216.173	3.607	3.603	-4.25263	-4.24780	I->F	07FFFFFF	
GTS4QT11	●●●●●●●●●●●●●●●●	S08	177.892	177.793	2.965	2.963	-3.49355	-3.49178	I->F	07FFFFFF	
GTS4KY1	●●●●●●●●●●●●●●●●	S08	0.010	0.000	0.005	0.000	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT12	●●●●●●●●●●●●●●●●	S08	267.415	267.311	4.457	4.455	6.26078	6.25738	I->F	07FFFFFF	
GTS4QT13	●●●●●●●●●●●●●●●●	S08	164.855	164.705	2.748	2.745	-3.24238	-3.23953	I->F	07FFFFFF	
GTS4KS1	●●●●●●●●●●●●●●●●	S08	0.537	0.510	0.063	0.060	0.06834	0.06495	I->F	07FFFFFF	
GTS4MU1	●●●●●●●●●●●●●●●●	S08	401.892	401.917	4.465	4.466	-4.58286	-4.57617	Hall	07FFFFFF	0.77814
GTS4MU1	●●●●●●●●●●●●●●●●	S08					-4.57687		I>Bl	---"---	
GTS4KS2	●●●●●●●●●●●●●●●●	S08	11.022	11.033	1.297	1.298	1.40282	1.40414	I->F	07FFFFFF	
GTS4QD21	●●●●●●●●●●●●●●●●	S08	185.052	184.435	3.084	3.074	-3.63439	-3.62267	I->F	07FFFFFF	
GTS4KY2	●●●●●●●●●●●●●●●●	S08	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●●●●●●●●●●●●●●●●	S08	163.372	162.914	2.723	2.715	3.20643	3.19754	I->F	07FFFFFF	
GTS4QD31	●●●●●●●●●●●●●●●●	S08	118.381	117.935	1.973	1.966	2.31999	2.31096	I->F	07FFFFFF	
GTS4QD32	●●●●●●●●●●●●●●●●	S08	176.995	176.580	2.950	2.943	-3.48458	-3.47661	I->F	07FFFFFF	
GTS4KS3	●●●●●●●●●●●●●●●●	S08	10.348	10.353	1.217	1.218	1.31698	1.31771	I->F	07FFFFFF	
GHFSMU1	●●●●●●●●●●●●●●●●	S08	400.711	400.460	4.452	4.450	4.57945	4.57583	Hall	07FFFFFF	
GHFSMU1	●●●●●●●●●●●●●●●●	S08					4.57832		I>Bl	---"---	
GHFSMU1_0	●●●●●●●●●●●●●●●●	S08	1.101		1.101		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GHFSKS1	●●●●●●●●●●●●●●●●	S08	0.127	0.038	0.015	0.005	0.01618	0.00490	I->F	07FFFFFF	0.77745
GHFSQT11	●●●●●●●●●●●●●●●●	S08	112.284	112.095	1.871	1.868	-2.20773	-2.20371	I->F	07FFFFFF	
GHFSQT12	●●●●●●●●●●●●●●●●	S08	231.489	231.326	3.858	3.855	5.41956	5.41572	I->F	07FFFFFF	
GHFSQT13	●●●●●●●●●●●●●●●●	S08	184.155	184.181	3.069	3.070	-3.61875	-3.61949	I->F	07FFFFFF	
GHFSKY1	●●●●●●●●●●●●●●●●	S08	-0.007	0.000	-0.003	0.000	0.00001	0.00000	I->F	07FFFFFF	

SIS–TS–HFS

Mar 2014 03:37:41.07

BS_{12} = 10.6586 Tm

BS_{24} = 8.7657

scale

TA-S2 = $\frac{9.8927}{10.6586}$ = 0.92814

Target # 35 in → 2511 mg/cm² Be.

TPC 21 : 1.5

TPC 22 = 2.0

scale by -1.5 mm. Factor = 1.0002

Scaling done without ramping.

TPC 21 = 0.0 mm

TPC 22 = 0.7 mm.

Effective thickness: 2505 mg/cm².

Now we put Ta + S2 degrade. for the last ToF point.

scale:

S2-S4: $\frac{7.8181}{8.7657}$ = 0.89189 → old target thickness.

TPC 21 = 0.1 TPC 41 = -1.8

TPC 22 = 0.5 TPC 42 = ~~-1.8~~ -1.1

Now we put the target thickness and scale:

S2-S4 = $\frac{7.8417}{\cancel{8.7657}}$ = $\frac{7.8417}{7.8181}$ = 1.00302 → wrong factor

SC 21 wrong in LISE

We scale back the last one

factor = 0.99699

TPC 21 = TPC 41 = -1.8

22 = TPC 42 = -1.0

Scale by +1.5 mm. Factor = 1.00024.

Now we went too much in this direction
we scale by -0.5mm. Factor=0.9992

TPC 41 = 0.2
42 = 0.0

S426_18

section. TA. Be 2.5g/cm² S2 deg 5g. centered

20. Mar 2014
04:30:09.72

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	S426
Beschleuniger	S08
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	S08	8.591	8.770	0.859	0.877	0.00394	0.00402	I->F	07FFFFFF	
GTE1QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	51.690	51.645	1.880	1.878	-1.25495	-1.25386	I->F	07FFFFFF	
GTE1QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	680.587	680.763	5.918	5.920	1.49023	1.49061	I->F	07FFFFFF	
GTS1MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.778	0.706	0.078	0.071	0.00037	0.00034	I->F	07FFFFFF	
GTS1QD11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	162.447	162.510	5.415	5.417	6.26771	6.27012	I->F	07FFFFFF	
GTS1QD12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	171.310	171.300	5.710	5.710	-6.60704	-6.60668	I->F	07FFFFFF	
GTS1MU2	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	322.964	322.942	5.872	5.872	1.54822	1.54837	I->F	07FFFFFF	
GTS2QT11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	114.573	114.388	1.910	1.906	-2.24145	-2.23757	I->F	07FFFFFF	
GTS2QT12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	272.982	272.853	4.550	4.548	6.37235	6.36828	I->F	07FFFFFF	
GTS2QT13	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	184.210	184.212	3.070	3.070	-3.60587	-3.60620	I->F	07FFFFFF	
GTS2KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	2.117	2.133	0.249	0.251	0.26941	0.27142	I->F	07FFFFFF	
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	452.788	452.436	5.031	5.027	5.25803	5.17311	Hall	07FFFFFF	0.89265
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					5.17802		I>Bl	---"---	
GTS3MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.005		0.005		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	15.053	15.049	1.771	1.770	1.91588	1.91534	I->F	07FFFFFF	
GTS3QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	192.981	192.758	3.216	3.213	-3.77842	-3.77440	I->F	07FFFFFF	
GTS3QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	121.201	121.200	2.020	2.020	2.37223	2.37205	I->F	07FFFFFF	
GTS3QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	184.484	184.294	3.075	3.072	3.61342	3.60995	I->F	07FFFFFF	
GTS3KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	208.655	208.567	3.478	3.476	-4.08776	-4.08643	I->F	07FFFFFF	
GTS3KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	12.924	12.897	1.520	1.517	1.64483	1.64140	I->F	07FFFFFF	
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	454.765	452.884	5.053	5.032	-5.19033	-5.17245	Hall	07FFFFFF	0.88124
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					-5.19449		I>Bl	---"---	
GTS3KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.425	0.406	0.050	0.048	0.05415	0.05170	I->F	07FFFFFF	
GTS3QT31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	188.055	187.812	3.134	3.130	-3.69449	-3.68995	I->F	07FFFFFF	
GTS3QT32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	302.133	302.062	5.036	5.034	7.06858	7.06687	I->F	07FFFFFF	
GTS3KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.011	0.000	-0.005	0.000	-0.00001	0.00000	I->F	07FFFFFF	
GTS3QT33	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	200.928	200.669	3.349	3.344	-3.94811	-3.94335	I->F	07FFFFFF	
GTS4QT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	158.739	158.581	2.646	2.643	-3.11752	-3.11447	I->F	07FFFFFF	
GTS4KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.010	0.000	0.005	0.000	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	238.411	238.300	3.974	3.972	5.58405	5.58123	I->F	07FFFFFF	
GTS4QT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	147.038	146.897	2.451	2.448	-2.89228	-2.88948	I->F	07FFFFFF	
GTS4KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.480	0.455	0.056	0.054	0.06108	0.05794	I->F	07FFFFFF	
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	358.577	358.572	3.984	3.984	-4.08869	-4.08168	Hall	07FFFFFF	
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					-4.08110		I>Bl	---"---	0.69414
GTS4KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	9.834	9.840	1.157	1.158	1.25161	1.25242	I->F	07FFFFFF	
GTS4QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	165.130	164.508	2.752	2.742	-3.24327	-3.23122	I->F	07FFFFFF	
GTS4KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	145.793	145.305	2.430	2.422	2.86168	2.85203	I->F	07FFFFFF	
GTS4QD31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	105.637	105.182	1.761	1.753	2.07049	2.06124	I->F	07FFFFFF	
GTS4QD32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	157.897	157.471	2.632	2.625	-3.10926	-3.10094	I->F	07FFFFFF	
GTS4KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	9.232	9.235	1.086	1.086	1.17502	1.17532	I->F	07FFFFFF	
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	357.643	357.207	3.974	3.969	4.08482	4.08138	Hall	07FFFFFF	
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					4.08494		I>Bl	---"---	0.69355
GHFSMU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	1.098		1.098		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GHFSKS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.127	0.034	0.015	0.004	0.01618	0.00437	I->F	07FFFFFF	
GHFSQT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	100.162	99.958	1.669	1.666	-1.96992	-1.96558	I->F	07FFFFFF	
GHFSQT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	206.476	206.272	3.441	3.438	4.83490	4.83051	I->F	07FFFFFF	
GHFSQT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	164.251	164.276	2.738	2.738	-3.22779	-3.22838	I->F	07FFFFFF	
GHFSKY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.008	0.000	-0.004	0.000	0.00001	0.00000	I->F	07FFFFFF	

SIS–TS–HFS
Mar 2014 04:30:09.72

$B\rho_{12}$ = 9.8953

$B\rho_{24}$ = 7.8214

Now we scale to go to Br.

TA-S1: 10.0765 / 9.8953 = 1.018312

S1-S2: 9.4566 / 9.8953 = 0.955666

S2-S4: 7.2706 / 7.8214 = 0.929578

S426_19 — ^{85}Br setting

section, TA: Be 2.5g/cm², S1 deg: 2g/cm², S2 deg: 5g/cm²

20. Mar 2014
05:16:43.13

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	S426
Beschleuniger	S08
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	S08	8.591	8.770	0.859	0.877	0.00394	0.00402	I->F	07FFFFFF	
GTE1QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	51.690	51.645	1.880	1.878	-1.25495	-1.25386	I->F	07FFFFFF	
GTE1QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	680.236	680.763	5.915	5.920	1.48946	1.49061	I->F	07FFFFFF	
GTS1MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.778	0.706	0.078	0.071	0.00037	0.00034	I->F	07FFFFFF	
GTS1QD11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	162.520	162.510	5.417	5.417	6.27051	6.27012	I->F	07FFFFFF	
GTS1QD12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	171.310	171.300	5.710	5.710	-6.60704	-6.60668	I->F	07FFFFFF	
GTS1MU2	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	322.863	322.942	5.870	5.872	1.54774	1.54837	I->F	07FFFFFF	
GTS2QT11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	116.660	116.483	1.944	1.941	-2.28226	-2.27853	I->F	07FFFFFF	
GTS2QT12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	277.981	277.856	4.633	4.631	6.48878	6.48489	I->F	07FFFFFF	
GTS2QT13	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	187.561	187.581	3.126	3.126	-3.67153	-3.67223	I->F	07FFFFFF	
GTS2KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	2.156	2.172	0.254	0.255	0.27436	0.27639	I->F	07FFFFFF	
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	461.055	460.722	5.123	5.119	5.35419	5.26783	Hall	07FFFFFF	
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					5.27190		I>Bl	---"---	0.90875
GTS3MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.002		0.002		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	15.347	15.325	1.805	1.803	1.95319	1.95040	I->F	07FFFFFF	
GTS3QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	196.515	196.282	3.275	3.271	-3.84770	-3.84350	I->F	07FFFFFF	
GTS3QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	123.435	123.419	2.057	2.057	2.41593	2.41548	I->F	07FFFFFF	
GTS3QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	176.391	176.137	2.940	2.936	3.45467	3.44989	I->F	07FFFFFF	
GTS3KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	199.426	199.331	3.324	3.322	-3.90675	-3.90524	I->F	07FFFFFF	
GTS3KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	12.350	12.325	1.453	1.450	1.57186	1.56862	I->F	07FFFFFF	
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	434.578	432.734	4.829	4.808	-4.96039	-4.94311	Hall	07FFFFFF	
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					-4.96402		I>Bl	---"---	0.84214
GTS3KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.410	0.388	0.048	0.046	0.05216	0.04940	I->F	07FFFFFF	
GTS3QT31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	179.760	179.484	2.996	2.991	-3.53158	-3.52634	I->F	07FFFFFF	
GTS3QT32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	288.693	288.648	4.812	4.811	6.75515	6.75352	I->F	07FFFFFF	
GTS3KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.011	0.000	-0.005	0.000	-0.00001	0.00000	I->F	07FFFFFF	
GTS3QT33	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	192.029	191.767	3.200	3.196	-3.77335	-3.76850	I->F	07FFFFFF	
GTS4QT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	147.569	147.413	2.459	2.457	-2.89826	-2.89515	I->F	07FFFFFF	
GTS4KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.010	0.000	0.005	0.000	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	221.564	221.457	3.693	3.691	5.19055	5.18820	I->F	07FFFFFF	
GTS4QT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	136.674	136.545	2.278	2.276	-2.68864	-2.68600	I->F	07FFFFFF	
GTS4KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.446	0.423	0.052	0.050	0.05679	0.05386	I->F	07FFFFFF	
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	333.500	333.389	3.706	3.704	-3.80163	-3.79425	Hall	07FFFFFF	
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					-3.79517		I>Bl	---"---	0.64544
GTS4KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	9.142	9.147	1.075	1.076	1.16346	1.16422	I->F	07FFFFFF	
GTS4QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	153.539	152.923	2.559	2.549	-3.01575	-3.00367	I->F	07FFFFFF	
GTS4KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	135.539	135.067	2.259	2.251	2.66060	2.65119	I->F	07FFFFFF	
GTS4QD31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	98.184	97.765	1.636	1.629	1.92464	1.91609	I->F	07FFFFFF	
GTS4QD32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	146.800	146.365	2.447	2.439	-2.89116	-2.88257	I->F	07FFFFFF	
GTS4KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	8.584	8.584	1.010	1.010	1.09248	1.09255	I->F	07FFFFFF	
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	332.539	332.079	3.695	3.690	3.79757	3.79397	Hall	07FFFFFF	
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					3.79825		I>Bl	---"---	0.64475
GHFSMU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	1.096		1.096		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GHFSKS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.125	0.032	0.015	0.004	0.01585	0.00406	I->F	07FFFFFF	
GHFSQT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	93.094	92.901	1.552	1.548	-1.83128	-1.82717	I->F	07FFFFFF	
GHFSQT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	191.919	191.730	3.199	3.196	4.49431	4.49035	I->F	07FFFFFF	
GHFSQT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	152.715	152.706	2.545	2.545	-3.00120	-3.00104	I->F	07FFFFFF	
GHFSKY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.007	0.000	-0.003	0.000	0.00001	0.00000	I->F	07FFFFFF	

SIS–TS–HFS
Mar 2014 05:16:43.13

[illegible]

We put angle in S2 monoenergetic -15.98 (also ++)

TSSED7 DS: 26.2 grad

6:00 Voltage in Finger detector to 800V.
Some strips are missing.
TPC delay adjusted.

07:00 go to more high rate. from ~15 000 to ~150 000
spill 10s.

@ 07:21 spill 10s intensity 71000
@ 07:45 200 000
@ 08:00 500 000

08:14 ~~100 100~~ S2 slits ~~x position~~
start closing y position → -35 +35 no change in $\frac{D}{P}$
-30 +30
-25 25 cut beam a little
no change in ratio.

closing x position -38 +38 ratio change a little.
beam intensity ~ 250 000
-30 +30 beam ~ 22000

y position -20 +20
x -25 +25 beam 195 000
no many change on ratio.

x -10 +10 ratio → ~~bad~~ bad (better before)

S2 x open y -20 +20

S1 slits.

x	-10	+30	
	-10	+20	getting better
	-10	+10	

-5 +5 worst

S1 slits: x ~~±10~~ +10 +20 (as before).

S4 slits +25 -25 beam ~ 460 000
+20 -20

~~S~~ slits: S1 -10 +10 x
S2 x ~~-30~~ +30 y -20 +20
S3 ~~-30~~ 20 +29 x
S4 -35 +35 x

beam 160 000

09:20 → ask for more intensity. 850 000

20.3., 21:20 1.2×10^6 at S2, but only 10.000 at S4 !!!

Checking beam position on production target

→ H: 25.0mm V: -375.5mm → Target ladder drives #35 2

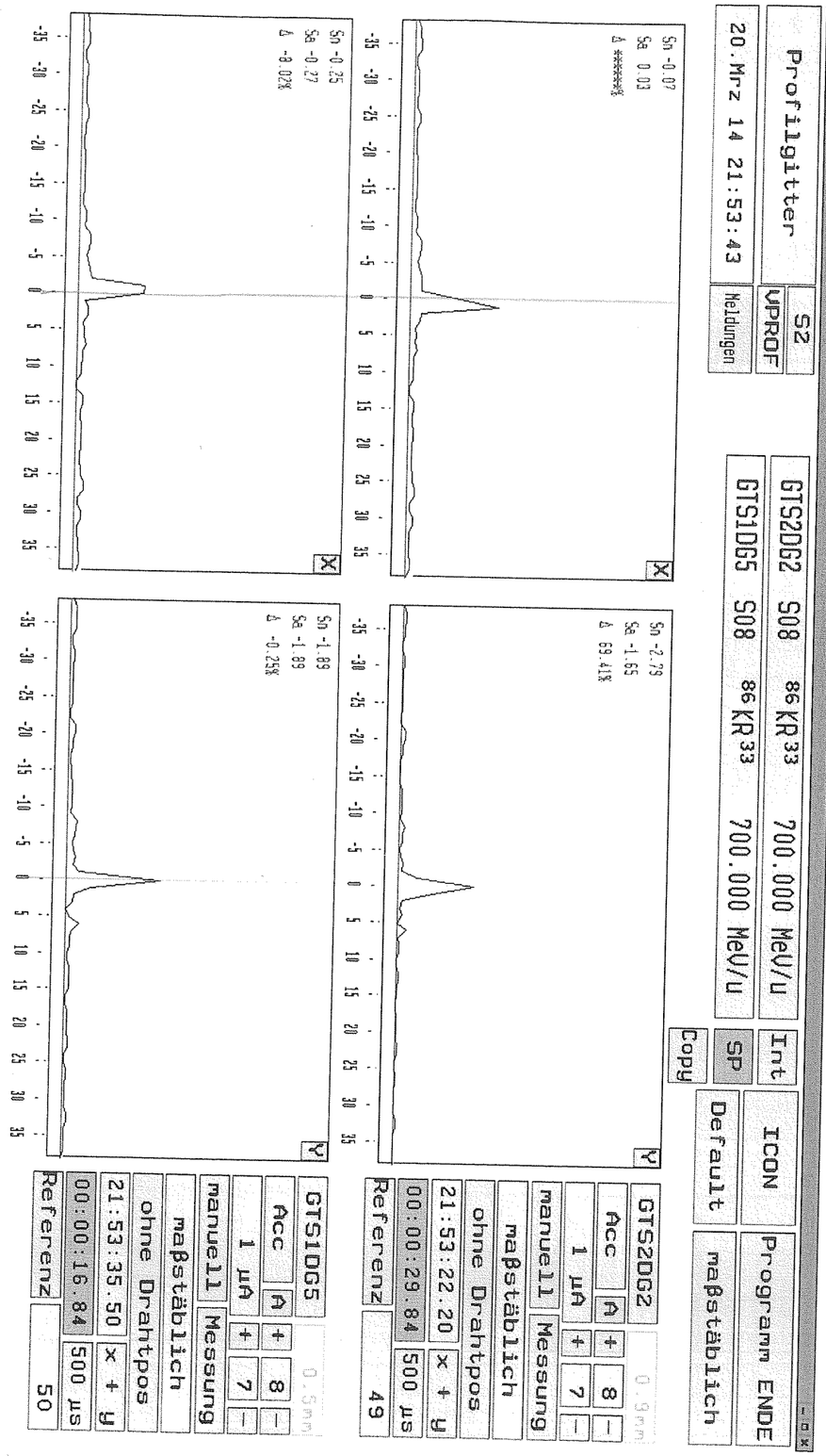
22:25 For some reason sectam and the duK were out. The beam was not centered and the count rates at S2. were too low.

We put sectam, disK and now we have:

TPC 21 = -3.6 TPC41 : 19

TPC 22 : -4.2 TPC42 : - 0.5

The SC21 was in the wrong position.
we put it back 247.0mm



Printout by the operators after centering the beam

26:00 beam given to biophysics. we are sharing beam
23:02 beam back.

21.3.2014

00:28. Finger voltage set to 850 V. This corresponds to 200 mV measured in the AWD signal in the scope

1:10. Finger thresholds set to 513. This is the lowest value. I will check now if I can get useful data from that.

15:45 Frs id is now calibrated in the online.

	ToF	β	ΔE_1	ΔE_2
1)	3324	0.8134413	1344	1372
2)	3127	0.7961977	1391	1423
3)	2744	0.7634833	1492	1529
4)	2249	0.7257152	1628	1673

offset = 12196,5365

distance = 7218,5909

$$\beta = \frac{\text{distance}}{\text{offset} - \text{ToF}}$$

	M1	M2
a	7279.19	7461.27
b	-14433.4	-14910
c	8271.47	8563.76

$\Delta E = a\beta^2 + b\beta + c$

$\rho^1_{TA-S2} = 11.082506$ $\rho^2_{TA-S2} = 11.226197$

$\rho^1_{S2-S4} = 11.267358$ $\rho^2_{S2-S4} = 11.279708$

20:20

We have beam now.

2 Magnets were off, we turned them on, scale by one and now we are running fine.

Files are open.

21:00 Seetam was not in. instead there was a pocket.
We closed files. Put seetam and open again.

~~2:40~~

Set 22 mA

2:54 TS3 MU2 is off from the stored value
Ramping TA - S4 by 1.

6426 - 29

^{85}Br settings

TA: 2.5 g/cm² S1: 2g/cm² S2 = 5g/cm² Sc 21 3.1mm

seetam

S4 off by 4mm

22. Mar 2014
02:56:07.93

FS

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

Magnetwerte/-status für Konsole FS	
Experimentplatz	HFS
Experimentnummer	S426
Beschleuniger	S08
Task	FSMS
Version	FSMS

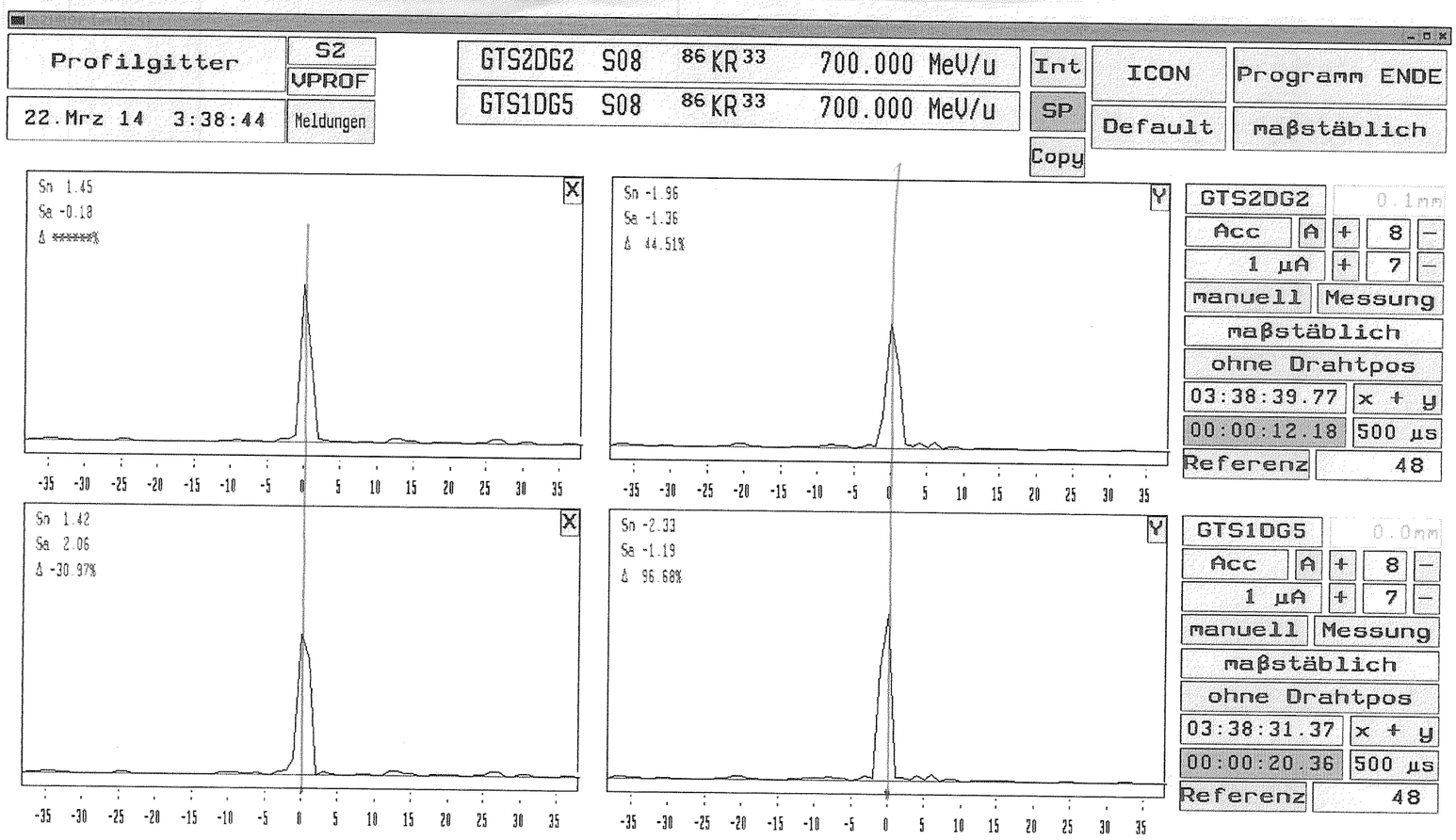
Name	AccStatus: ●aktiv ○inaktiv	Acc	Strom$_{Ist}$	Strom$_{Soll}$	Volt$_{Ist}$	Volt$_{Soll}$	B′ · l$_{Ist}$	B′ · l$_{Soll}$	Mode	Status	Fehler (Bit 0..15)
GTE1KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	2.390	2.518	0.239	0.252	0.00111	0.00117	I->F	07FFFFFF	
GTE1QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	51.623	51.645	1.877	1.878	-1.25332	-1.25386	I->F	07FFFFFF	
GTE1QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.126	0.495	0.005	0.018	0.01104	0.01986	I->F	07FFFFFF	
GTS1MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	700.838	701.251	6.094	6.098	1.53432	1.53530	I->F	07FFFFFF	~~0.90855~~
GTS1MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.002		0.002		0.00000		Dmy	FFFFFF86	Regler abgeglichen
GTS1KY1	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.241	0.066	0.024	0.007	0.00012	0.00004	I->F	07FFFFFF	
GTS1QD11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	162.447	162.510	5.415	5.417	6.26771	6.27012	I->F	07FFFFFF	
GTS1QD12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	171.236	171.300	5.708	5.710	-6.60424	-6.60668	I->F	07FFFFFF	
GTS1MU2	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	319.556	319.588	5.810	5.811	1.53201	1.53240	I->F	07FFFFFF	
GTS2QT11	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	116.642	116.483	1.944	1.941	-2.28190	-2.27853	I->F	07FFFFFF	
GTS2QT12	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	277.981	277.856	4.633	4.631	6.48878	6.48489	I->F	07FFFFFF	
GTS2QT13	○①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	187.579	187.581	3.126	3.126	-3.67189	-3.67223	I->F	07FFFFFF	
GTS2KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	2.156	2.172	0.254	0.255	0.27436	0.27639	I->F	07FFFFFF	
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	461.055	460.721	5.123	5.119	5.35199	5.26782	Hall	07FFFFFF	0.90855
GTS3MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					5.27252		I>Bl	---"---	
GTS3MU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.005		0.005		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GTS3KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	15.328	15.325	1.803	1.803	1.95088	1.95040	I->F	07FFFFFF	
GTS3QD11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	196.496	196.282	3.275	3.271	-3.84734	-3.84350	I->F	07FFFFFF	
GTS3QD12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	123.435	123.419	2.057	2.057	2.41593	2.41548	I->F	07FFFFFF	
GTS3QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	176.354	176.137	2.939	2.936	3.45395	3.44989	I->F	07FFFFFF	
GTS3KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.020	0.000	0.009	0.000	0.00002	0.00000	I->F	07FFFFFF	
GTS3QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	199.408	199.331	3.323	3.322	-3.90639	-3.90524	I->F	07FFFFFF	
GTS3KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	12.350	12.325	1.453	1.450	1.57186	1.56862	I->F	07FFFFFF	
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	434.632	432.785	4.829	4.809	-4.96075	-4.94368	Hall	07FFFFFF	0.841224
GTS3MU2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					-4.96465		I>Bl	---"---	
GTS3KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.407	0.388	0.048	0.046	0.05183	0.04940	I->F	07FFFFFF	
GTS3QT31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	179.742	179.484	2.996	2.991	-3.53122	-3.52634	I->F	07FFFFFF	
GTS3QT32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	288.711	288.648	4.812	4.811	6.75558	6.75352	I->F	07FFFFFF	
GTS3KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.011	0.000	-0.005	0.000	-0.00001	0.00000	I->F	07FFFFFF	
GTS3QT33	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	192.010	191.767	3.200	3.196	-3.77299	-3.76850	I->F	07FFFFFF	
GTS4QT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	147.569	147.413	2.459	2.457	-2.89826	-2.89515	I->F	07FFFFFF	
GTS4KY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.010	0.000	0.005	0.000	0.00001	0.00000	I->F	07FFFFFF	
GTS4QT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	221.564	221.457	3.693	3.691	5.19055	5.18820	I->F	07FFFFFF	
GTS4QT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	136.674	136.545	2.278	2.276	-2.68864	-2.68600	I->F	07FFFFFF	
GTS4KS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.449	0.423	0.053	0.050	0.05712	0.05386	I->F	07FFFFFF	
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	333.638	333.389	3.707	3.704	-3.80126	-3.79425	Hall	07FFFFFF	
GTS4MU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					-3.79485		I>Bl	---"---	0.641534
GTS4KS2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	9.136	9.147	1.075	1.076	1.16280	1.16422	I->F	07FFFFFF	
GTS4QD21	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	153.539	152.923	2.559	2.549	-3.01575	-3.00367	I->F	07FFFFFF	
GTS4KY2	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.001	0.000	0.000	0.000	0.00000	0.00000	I->F	07FFFFFF	
GTS4QD22	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	135.337	135.067	2.256	2.251	2.65665	2.65119	I->F	07FFFFFF	
GTS4QD31	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	98.221	97.765	1.637	1.629	1.92535	1.91609	I->F	07FFFFFF	
GTS4QD32	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	146.800	146.365	2.447	2.439	-2.89116	-2.88257	I->F	07FFFFFF	
GTS4KS3	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	8.581	8.584	1.010	1.010	1.09215	1.09255	I->F	07FFFFFF	
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	332.566	332.068	3.695	3.690	3.79757	3.79385	Hall	07FFFFFF	
GHFSMU1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08					3.79950		I>Bl	---"---	0.641475
GHFSMU1_0	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	1.096		1.096		0.00000		Dmy	FFFFFFFF	Regler abgeglichen
GHFSKS1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	0.132	0.032	0.016	0.004	0.01684	0.00406	I->F	07FFFFFF	
GHFSQT11	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	93.075	92.897	1.551	1.548	-1.83092	-1.82709	I->F	07FFFFFF	
GHFSQT12	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	191.864	191.681	3.198	3.195	4.49302	4.48919	I->F	07FFFFFF	
GHFSQT13	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	152.715	152.706	2.545	2.545	-3.00120	-3.00104	I->F	07FFFFFF	
GHFSKY1	●①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬⑭⑮	S08	-0.008	0.000	-0.004	0.000	0.00001	0.00000	I->F	07FFFFFF	

SIS-TS-HFS 22. Mar 2014 02:56:07.93

Not centered setting. Do not use to scale in the future.

3:25 Loaded S426-19.

After loading the beam is not centered in the primary target.



Trigger at +2 s from the middle

52: 250 kHz

54: 120 kHz.

4.

TPC 21 = -2.9 mm TPC 41 -3.9

TPC 22 = -2.3 TPC 42 -4.0

TPC21 = -2.2 mm TPC 41 = -3.1

TPC 22 = -1.9 TPC42 = -3.5.

- We scale 52-54 by 5 mm.
  factor = 1.000417
  We scale without ramping.

TPC 21 = -2.8 TPC 41 = -1.2

TPC 22 = -2.3 TPC 42 = -1.6

In DSSD x position is -1.2

- We scale again by 1.5 mm
  factor = 1.000024
  Scale without ramping.

TPC 21 = -2.8 TPC91 = -1.0

TPC 22 = -1.9 TPC42 = -1.0

4.25. We save the settings.