


E127: Proton capture on ^{118}Te

11 May 2021

Shahab Sanjari created group «E127: Proton capture on ^{118}Te in ESR » with members Shahab Sanjari, Sergey Litvinov, Yuri Litvinov, Helmut Weick and Jan Glorius

Shahab Sanjari changed group title to «E127: Proton capture on ^{118}Te in ESR»

Shahab Sanjari converted this group to a supergroup

E127: Proton capture on ^{118}Te converted a basic group to this supergroup «E127: Proton capture on ^{118}Te in ESR»

Laszlo Varga removed Laszlo Varga



Laszlo Varga

15:49

Hi Everybody!

Shahab Sanjari changed group photo



Ragandeep joined group by link from Group

Rene Reifarth joined group by link from Group

Laszlo Varga invited Michele Sguazzin

Michele Sguazzin invited Cobus Swartz

Sophia Dellmann joined group by link from Group

Beatriz joined group by link from Group

Ruijiu Chen joined group by link from Group

12 May 2021

Marialuisa Aliotta joined group by link from Group



Jan Glorius

15:55

There is a serious power failure in ESR just now. No vacuum readouts. Maybe we have a bigger problem... Let's see



Yuri Litvinov

15:58

Oooh(((



Sergey Litvinov

16:09

black out

E127: Proton capture on ^{118}Te

13 May 2021

- UP** **Ulrich Popp** 10:22
The pumps of the gas target are also switched off. I write Nikos to switch them on.
- JG** **Jan Glorius** 10:26
At least from the ring vacuum it looks not so bad... There are some sensors out of order now. But the rest shows pretty low pressure $\leq 1\text{e-}10\text{mbar}$
Also the laser cooling experiment was running over night again. 10:27
- YL** **Yuri Litvinov** 13:28
Jan, you are at GSI!? Do you need any help?
- JG** **Jan Glorius** 13:30
Yes, i am in the lab. Cobus is around and helping me, don't worry 🍑
- R** **Ragandeep** 15:10
I'm also at GSI. If you need any help help, do let me know)
- LV** **Laszlo Varga** 15:13
I am also available 0–24, just text me and i come on short notice 😊





14 May 2021

- UP** **Ulrich Popp** 21:26
We have a cooling problem in the ESR
The Cooling Station is switched off because of the blackout 21:27
It is in the ESR 21:27
cave 21:27
- JG** **Jan Glorius** 21:27
Target cooling?
- UP** **Ulrich Popp** 21:28
Pump cooling for the target
- YL** **Yuri Litvinov** 21:28
How serious it is? We have about a week before we need the target...
- UP** **Ulrich Popp** 21:30
Our problem is that during the next 2hours all pumps will be switched off
- YL** **Yuri Litvinov** 21:30
O–ooh
Ulrich Popp

E127: Proton capture on ^{118}Te

JG	Jan Glorius	21:31
	What can we do? Enter cave and restart cooling I guess.	
YL	Yuri Litvinov	21:31
	Can you prevent this?	
UP	Ulrich Popp	21:32
	not remote	
	Someone has to go in and to switch on the heat exchanger (Wärmetauscherstation).	21:32
JG	Jan Glorius	21:33
	Where is the switch? Directly at the new water cooling cycle?	
YL	Yuri Litvinov	21:35
	We can send somebody from the Danyal's shift!?	
UP	Ulrich Popp	21:35
	If it doesnt start you have to open it and manually switch on the fuse, maybe it is off. It looks like this: https://m.media-amazon.com/images/I/41TT-QpSUJL.jpg	
	the station is on the left side when you go in the inner area . It is connected with black isolated water pipes.	21:37
	The only device connected with this black isolated pipes there	21:38
JG	Jan Glorius	21:39
	Okay, so we need someone who does it. Open ESR and push button. Can we reach danyals people?	
UP	Ulrich Popp	21:42
	There is a button (i think black) for switch on and a red one for switch off. But if it doesnt switch on, you have to open it (big screwdriver). But you can see it behind the (plexi) glass. ;)	
YL	Yuri Litvinov	21:42
	Uli, can you call HKR and give instructions to to Danyal. He is at 2245	
UP	Ulrich Popp	21:42
	ok!!	
	danyal tries it :)	21:46
JG	Jan Glorius	21:47
	Oh ha... The guy with the two left hands 🙈	
LV	Laszlo Varga	21:48
	😄	
	Ulrich Popp	

E127: Proton capture on ^{118}Te








-  **Jan Glorius** 21:59
👍
-  **Yuri Litvinov** 21:59
With a left hand))
-  **Jan Glorius** 21:59
Thanks Ulli for keeping an eye on this 🙏
-  **Laszlo Varga** 22:14
Zsíír

16 May 2021

Diego joined group by link from Group

Jan Glorius invited Uwe Spillmann

17 May 2021

-  **Jan Glorius** 08:51
Uli, the Norhoff pump at the target makes Piep noises. Is this a Probleme?
- ESR is open now until 10 or so, tell me if I can do something 08:52
- Pierre-Michel Hillebrand joined group by link from Group
-  **Ulrich Popp** 10:12
I have to fill it when I start with Hydrogen. Tomorrow or Wednesday I have to refill it.
-  **Jan Glorius** 10:13
👍
-  **Ulrich Popp** 10:13
I dont really remember how long it works until refill, I have an alarm sending an Email.
- Maybe Somebody has to fill it during Weekend 10:13
-  **Jan Glorius** 10:15
Let's discuss in detail the next days what tasks for the target need to be covered by us.
-  **Ulrich Popp** 10:19
yes
- Thanassis Psaltis joined group by link from Group
-  **Jan Glorius** 14:29
We will have our first meeting today at 15:30 CEST. Follow the link and go to the "meeting" break-out session.

E127: Proton capture on ^{118}Te

Meeting ID: 755 677 8300

Kenncode: e127

- YL

Yuri Litvinov
Resonance measurement will take place tomorrow around noon, when the cooler is taken into operation. TCap will be needed.

17:03
- RC

Ruijiu Chen
ok
when is noon? 12:00?

17:04
17:05
- YL

Yuri Litvinov
Yes, around lunch time.

17:06
- SL

Sergey Litvinov
In reply to [this message](#)
you have to be ready from 9-00 :))

17:06
- RC


Ruijiu Chen
ok

17:06
- R


Ragandeep
👍

17:24
- SS

Shahab Sanjari

 **Sticker**
👍

18:56
- LV


Laszlo Varga


20:15
- 18 May 2021

Chris Griffin joined group by link from Group

Iris Dillmann joined group by link from Group
- ID


Iris Dillmann

 **Sticker**
👏

Hi folks, do we have daily meetings starting this week? Missed today since it came a bit early 😊

03:48
03:49

E127: Proton capture on ^{118}Te

- SS** **Shahab Sanjari** 11:56
we make a quick resonance measurement in about 45 min
currently @HoSnoopy is fixing the target inside ESR 11:57
- SS** **Shahab Sanjari** 13:18
@HoSnoopy what is the status?
- SS** **Shahab Sanjari** 13:44
can we come?
- UP** **Ulrich Popp** 13:45
I refilled the liq nitrogen gas trap and the ESR is already closed
- SS** **Shahab Sanjari** 13:45
ok, we start...
- YL** **Yuri Litvinov** 13:46
It will not work today(((
The time window which was available is over... now there are 13:47
stochastic people. Markus suggests tomorrow noon
- R** **Ragandeep** 13:53
:/
- SS** **Shahab Sanjari** 14:08
In reply to [this message](#)
well there was no real "time window" in that sense as stochastic cooling 14:08
experts apparently started the setup while ESR was still red, and they
still continue. So we wait...
- YL** **Yuri Litvinov** 15:05
I know, but the priority is undoubtedly to set up the present
experiment....
Guy Leckenby joined group by link from Group
- YL** **Yuri Litvinov** 21:17

- SS** **Shahab Sanjari** 21:24
👍
Jan Glorius

E127: Proton capture on ^{118}Te

the cost of a factor of 2 in duty cycle.

Sounds reasonable 🙏



Yuri Litvinov

21:29

There are still optimization options....



Jan Glorius

21:34

I guess the stochastic cooling is working, when you are already accumulating?



Sergey Litvinov

21:41

Is stochastic cooling switching off after stacking?



Yuri Litvinov

21:42

Yes, it does.

19 May 2021

Timo Dickel joined group by link from Group



Shahab Sanjari

13:34

thanks to [Сергей A.](#) and [Chen](#) and [Ragandeep](#) , we did a 20 minute measurement / recording of the resonance. 🙏🙏

we are finished, p-gamma may continue

13:34



Ulrich Popp

14:43



Gasjet is available. :)

14:43



Yuri Litvinov

14:43

Excellent!



Laszlo Varga

14:44



Rene Reifarth

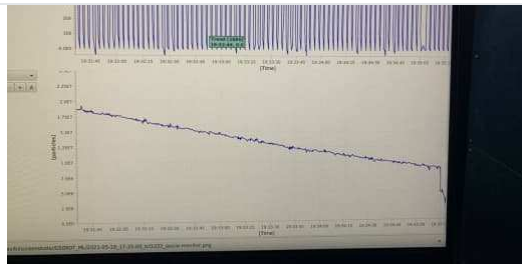
14:49

UR amazing.

Shahab Sanjari invited Nikos Petridis

Yuri Litvinov

E127: Proton capture on ^{118}Te



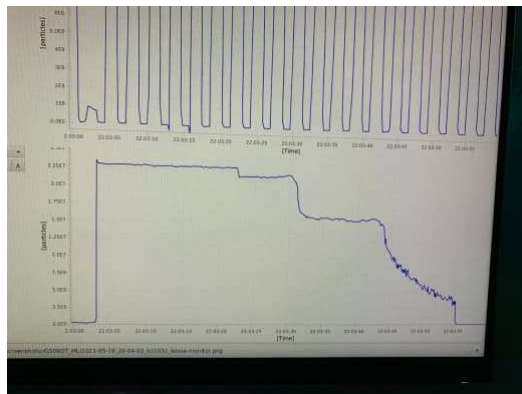
30 MeV/u half-life is a bit over 3 min

19:37

YL

Yuri Litvinov

22:06



About $1e7$ at 7 AMeV, lifetime about 5 sec

22:07

JG

Jan Glorius

22:08



YL

Yuri Litvinov

22:09

These $1e7$ look quite stable and not initial intensity dependent

JG

Jan Glorius

22:11

Okay, so this suggests that we are close to the charge state limit?

YL

Yuri Litvinov

22:12



20 May 2021

RR

Rene Reifarh

15:40

Hi Jan – do we have our meeting today?

LV

Laszlo Varga

15:42

Sorry we are busy with Jan now

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RR

Rene Reifarth

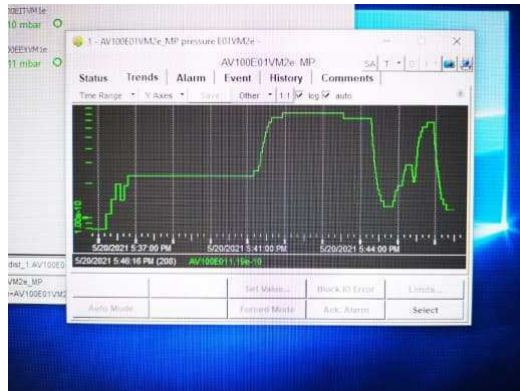
15:43

Yuri is running it

LV

Laszlo Varga

17:48



Vacuum change after detector movement

17:48

We remained in the E-10 range

17:49



17:58

Sergey approves

17:58

RR

Rene Reifarth

18:11

☹️ scary. is the H2-target already turned on?

LV

Laszlo Varga

21:21

Quick report for the shifters:

The shift for tonight (Jacobus & Michele) is canceled.

The morning shift (Sofia & Mario) can prepare for a start only from 10am. In the morning we will see if the morning shift is needed at all or not.

21 May 2021

YL

Yuri Litvinov

00:05

Is detector powered off?

LV

Laszlo Varga

00:05

I remember we left at 100V

Current ~ 0.35

00:06

E127: Proton capture on ^{118}Te

- YL

Yuri Litvinov
Excellent!

00:09
- YL

Yuri Litvinov
Short status:
The beam is decelerated to an orbit on the outside of the ESR
Detector position corresponding to killing the beam is at -80 mm,
counting from the innermost position.
This orbit cannot be used since the detector has to be placed merely 15 mm from the beam and the resultant -65 mm position disturbs the beam during the deceleration.
Unfortunately, applying a bump at the detector position disables electron cooling, which moves the beam onto a resonance due to its yet incomplete ramping down.
Various attempts to modify tunes, orbits, chromaticity were not successful: once the cooler is switched on, it destroys the beam.

Possible solutions:
1. We implemented a longer (5 s) waiting time at lowest energy to allow the cooler power supply to ramp down. This allows for reaching a cooled beam on the target and at the right position at the detector (present setting).
László took the detector into operation and there some counts.
X-ray rate is about 250 Hz.
Draw back – 5 seconds waiting kills at least half of our beam.....

2. we do not switch e-cooler at all and switch the target right after slowing down is completed.
Actually there is a 100 ms delay fixed in the software, grhhh)
X-ray rate is then 600 Hz.
But the beam is blown up very quickly.
May be it is possible to change the pattern such that we switch on the target and a few seconds later the cooler and use the survived beam, but this we did not test.

We can use the present setting to work on the detector but shall discuss the overall strategy ASAP.

04:00
- RR

Rene Reifarth
To me it sounds as if solution (1) is the most reliable one. We do lose a factor of 2, but we are in very defined situations and can probably extrapolate to the ^{118}Te case.

06:53
- YL

Yuri Litvinov
We need to set up the detector and see the rates

09:36
- RR

Rene Reifarth
right.

09:37
- JG

Jan Glorius
I am on it

09:50

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YL

Yuri Litvinov

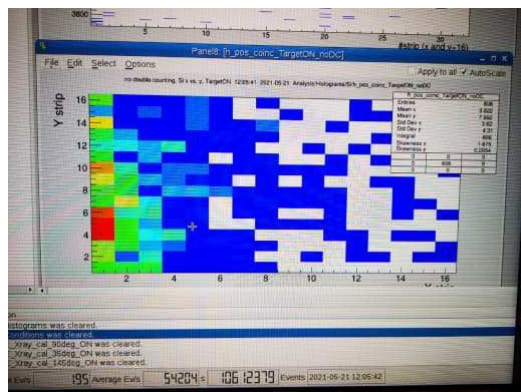
11:29

Excellent... I am in a meeting with Christoph on the run plan for Sunday

LV

Laszlo Varga

12:07



~30min test spectra

YL

Yuri Litvinov

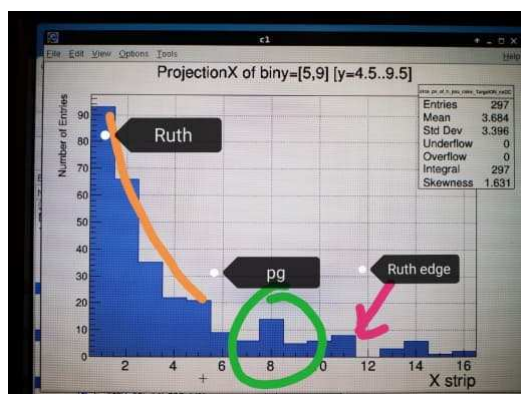
12:08

Looks not sooo bad))

LV

Laszlo Varga

12:24



Projection of the middle strips

12:24

Roughly what we expected

12:24

RR

Rene Reifarh

12:24

Cool!!

How many hours of experiment?

12:24

ah, 30min!! sorry. Very good!!!

12:25

MA

Marialuisa Aliotta

12:25

nice! 😊

LV

Laszlo Varga

12:26

In reply to [this message](#)

~1h

Bit less.maybe

12:26

RR

Rene Reifarh

12:26

so, after 1 d, we have decent statistics ... 😊

E127: Proton capture on ^{118}Te



12:29

RR

Rene Reifarh

12:29

nice to see that the Rutherford BG is rather low

LV

Laszlo Varga

12:29

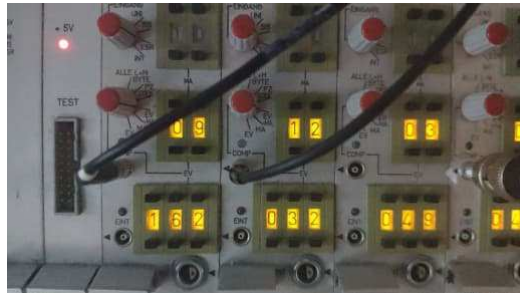
Take the spectra as a promising step

Philipp Erbacher joined group by link from Group

SL

Sergey Litvinov

17:24



suggestion to switch on the Target immediately after the deceleration

17:27

JG

Jan Glorius

17:28

Okay, why?

SL

Sergey Litvinov

17:30

to not waste time. but it is only suggestion

there is a cooling anyway

17:30

LV

Laszlo Varga

17:30

I am in the messhütte about to change

Jan?

17:30

JG

Jan Glorius

17:31

Not sure we can have evt 162 in the Messhütte... And not sure I fully understand. But let's do it now if you can. We can correct later. If needed

SL

Sergey Litvinov

17:31

don't change, you can change later. sorry for confusing

Laszlo do not change and go back :)

17:32

LV

Laszlo Varga

17:32

Ok, than i leave it like it is

JG

Jan Glorius

17:34

How many ions do we have now at start of 7 Me?

SL

Sergey Litvinov

17:37

1

E127: Proton capture on ^{118}Te

YL

Yuri Litvinov

19:39

Sergey, we forgot to put scrapers into event mode((could you help?
Also remotely. Jan is in HKR

SL

Sergey Litvinov

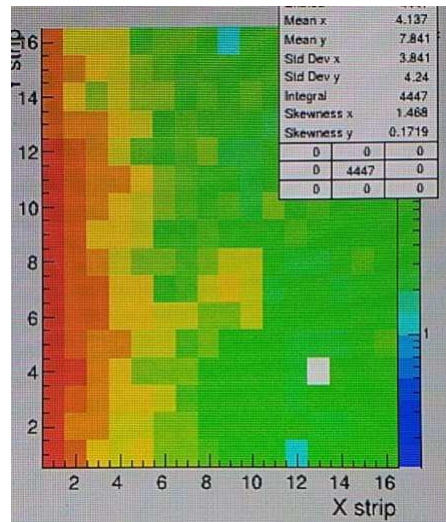
19:54

I explained, hope Jan will managed

JG

Jan Glorius

20:31



I think we are on a good track now. This is data from the last 45 minutes 👍

The ring setting is much better than before. Thanks to Sergey and Markus 🙏

YL

Yuri Litvinov

20:38

Very cute))

SL

Sergey Litvinov

20:40

In reply to [this message](#)

what is on the plot, scattering is cut?

In reply to [this message](#)

20:40

you are welcome, you know the price 🍷 :)

YL

Yuri Litvinov

20:40

Nope, the yellow square in the middle is p,g

JG

Jan Glorius

20:41

No scraper yet. We will do it later.

LV

Laszlo Varga

20:42

In reply to [this message](#)

I make you a lángos 😊



Animation

128.4 KB

20:44

Yuri Litvinov

Jan, could you please the telegram link to Thomas.

E127: Proton capture on ^{118}Te

- SS** **Shahab Sanjari** 20:57
In reply to [this message](#)
Should I add him to the group?
- Thomas Stöhlker joined group by link from Group
- TS** **Thomas Stöhlker** 21:17
Thanks👍
- ID** **Iris Dillmann** 21:54
In reply to [this message](#)
Sergey seems to be more the Blini with caviar guy... 😊 You can try to make langos with caviar but please dont buy the cheap stuff in the supermarket (Seehasenrogen)!!!!
- LV** **Laszlo Varga** 21:56
In reply to [this message](#)
About caviar lángos i have never heard before, maybe once 🤔
I suggest it with saure sahne and cheese 21:57
Like in the group picture 21:57
- ID** **Iris Dillmann** 21:59
https://www.google.com/url?q=https://masqueradedinner.com/blog/langos&sa=U&ved=2ahUKEwi2hq3ux9vwAhXOCTQIHTF3Ax8QFjAAegQICRAB&usg=AOvVaw0qYL9SreDyeyYhOsPaF_GO
- LV** **Laszlo Varga** 22:00
In reply to [this message](#)
Hmm, the receipt was made by a Hungarian lady, but for me this is too unorthodox
- SS** **Shahab Sanjari** 22:05
In reply to [this message](#)
not vegan guys, not vegan. go green 🌱
- ID** **Iris Dillmann** 22:23
[@xaratustra](#) I don't think the Pavlov dog experiment would work with vegan food 🤔🐕🐕
- JG** **Jan Glorius** 22:31
We are trying to move scrapers in ESR, but they do not move. Not by hand and not by event... Any idea? Any checkbox we might have forgotten?
We tried our RF-scraper in Egelhof position and also the "schnelle 22:32 scraper" behind cooler
- SL** **Sergey Litvinov** 22:32
can you make photo of the Ppos Tab?
- Jan Glorius**

E1 27: Proton capture on ^{118}Te

Sergey Litvinov

22:34

Press Luft Gerate

Jan Glorius

22:34

[illegible]

But they should move by hand, not?

22:35

Ulrich Popp

22:36

positionierbare Preßluftantriebe :)

Jan Glorius

22:38

In reply to [this message](#)

Uli, is there any reason those drives are disconnected or so?

Sergey Litvinov

22:40

Jan are you in HKR.

Jan Glorius

22:41

Yes

Ulrich Popp

22:41

try to reset them by using prophelper

Sergey Litvinov

22:41

Then take the phone

Jan Glorius

22:41

Have it

Ulrich Popp

22:44

ah, not reset in prophelper, do init!!

Sergey Litvinov

22:51

In prophelper?

Jan Glorius

22:55

Operators are trying to help

Sergey Litvinov

23:16

Managed?

Jan Glorius

23:17

They are moving by hand now... Not yet by event

E127: Proton capture on ^{118}Te

- JG** Jan Glorius 23:38
So, i can kill the beam clearly by hand in subchain 10. But the event mode does not move this device...
- YL** Yuri Litvinov 23:39
What do operators say?
- JG** Jan Glorius 23:49
They tried but have no clue about this event stuff
- 22 May 2021
- JG** Jan Glorius 00:03
So i guess we will run without scrapers over night. And see what can be done tomorrow...
- TS** Thomas Stöhlker 00:22
Puhhh...
- CS** Cobus Swartz 05:40
-
- From the overnight data.
- YL** Yuri Litvinov 07:40
Well, I can even not move them by hand((tried 2 scrapers and none moved...
- JG** Jan Glorius 07:40
They did move yesterday
- YL** Yuri Litvinov 07:40
Uli, whom can we call from Rufbereitschaft?
- Jan, I stopped the pattern and tried 2 scrapers. No reaction(07:41
- JG** Jan Glorius 07:42
Well, we had to reset and init in prophelper yesterday. Then they moved by hand
- The operators did this at the Unilac console, because their personal logins didn't give access to the devices. 07:48
- UP** Ulrich Popp 09:51
So you need me? I am still in bavaria 😊
- (I am not everytime online while it is shown, because of my xmpp-telegram-transport-bot.) 09:53

E127: Proton capture on ^{118}Te

Software groups were called – no errors were detected; we can move drives by hand; a girl from the software group told us that the events are in the control system; but the drives do not react on the events; next suggestion is whether the cabling is correct. We would go and look, but we do not know where the control unit is located. Uli, if you can, could you please advise us what can we do.....

Ulrich Popp

11:02

If the actuators are working by hand with the control system I cannot do anything. The responsibility is at the Software group.

Only if they are not working at all I maybe can do sth

11:03

Jan Glorius

11:04

Do the signals of hand and event mode come from the same source?
Which device in ESR is this?

Yuri Litvinov

11:04

Can we check somehow that the events are coming/not coming to the unit

Ulrich Popp

11:04

afaik yes

You can check is for example by using prohelper

11:05

it

11:05

Yuri Litvinov

11:06

I am sitting in front of propeller

Device is found

11:06

What shall I look at

11:07

Ulrich Popp

11:08

which device is it?

Yuri Litvinov

11:09

E01DD1IG

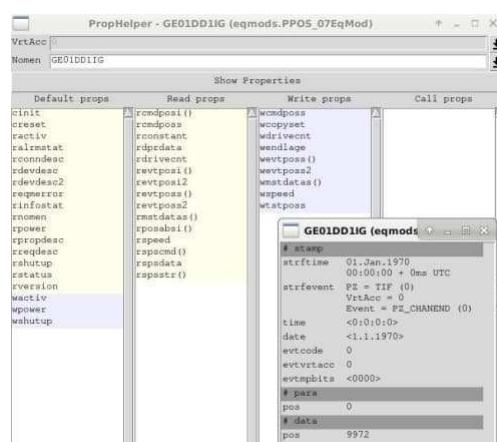
Jan Glorius

11:09

Egelhoff drive 1 GE01DD1IG

Ulrich Popp

11:10



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can I drive it?

11:11

YL

Yuri Litvinov

11:12

Sure

JG

Jan Glorius

11:13

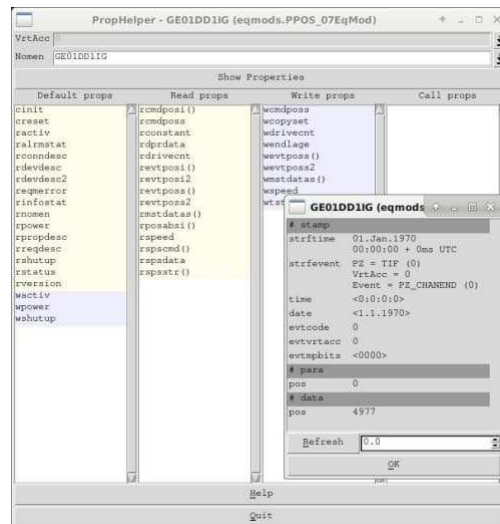
It moves

UP

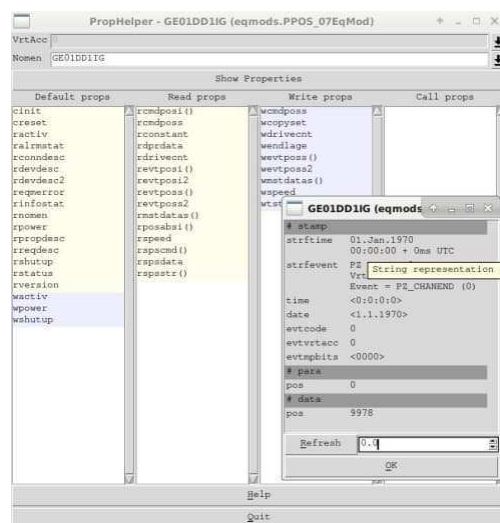
Ulrich Popp

11:14

No problem.



11:14



11:14

JG

Jan Glorius

11:15

It looks like a software/timing problem...

YL

Yuri Litvinov

11:15

Can we see that the event is not coming?

UP

Ulrich Popp

11:15

I only can say that the actuator works.

YL

Yuri Litvinov

11:15

Whom do you think we can call?

Ulrich Popp

E127: Proton capture on 118Te

JG	Jan Glorius	11:17
	We also see and can change the position in device control. So the events just don't reach the final drive controller or this one is does not accept them.	
YL	Yuri Litvinov	11:17
	Cabling? Do we have to select events somewhere locally?	
	Is there a module where the events shall be coming?	11:18
SL	Sergey Litvinov	11:18
	Events i saw yesterday in the snooptool	
	Event 162 and 163	11:18
	Detector position 1 and 2	11:19
YL	Yuri Litvinov	11:19
	In control system – yes, but do they reach the control unit?	
JG	Jan Glorius	11:20
	This also affects the "schnelle scraper" GE02DS3HG. So it seems to be a more general thing	
SL	Sergey Litvinov	11:20
	May be it is not enough time to drive detector in SC 9	
YL	Yuri Litvinov	11:20
	We drive them in 11	
JG	Jan Glorius	11:20
	We are using 10 and 11 right now	
SL	Sergey Litvinov	11:21
	Should be enough time	
YL	Yuri Litvinov	11:21
	11 has repetitions....	
	Can this be a reason? We can drive them in 4 to test	11:22
SL	Sergey Litvinov	11:23
	I know only that in the past, deactivate their event mode and sending whole context helped	
	I explained to Jan yesterday.... looks now, it does not work	11:24
YL	Yuri Litvinov	11:24
	I sent context at least 3 times today	
SL	Sergey Litvinov	11:25
	What is the maximun outer position of Egelhof can one send via device control	

E127: Proton capture on ^{118}Te

	I think	11:25
YL	Yuri Litvinov 100 mm	11:25
UP	Ulrich Popp positive, not negative 10000 means 100mm	11:25 11:25
JG	Jan Glorius I moved it from 100mm to -50mm -59mm is max	11:25 11:25
UP	Ulrich Popp -59mm ?? okay	11:26 11:26
SL	Sergey Litvinov May be in the paramodi somehow wrong dimensions, which however i checked before and it was fine	11:26
JG	Jan Glorius No, it can move beyond beam axis	11:26
UP	Ulrich Popp ah, right, yes, It can move about 150mm at all, a special configuration, but it is not so good for the bello	11:26
JG	Jan Glorius We won't need this much movement	11:27
UP	Ulrich Popp normally they only can move 125mm at all	11:27
YL	Yuri Litvinov I tried other values, +50 mm, did not help We try another scraper Did not move((11:27 11:29 11:30
UP	Ulrich Popp which one?	11:31
SL	Sergey Litvinov Can Egelhof detector be always in?	11:31
JG	Jan Glorius In reply to this message This one In reply to this message	11:31 11:31

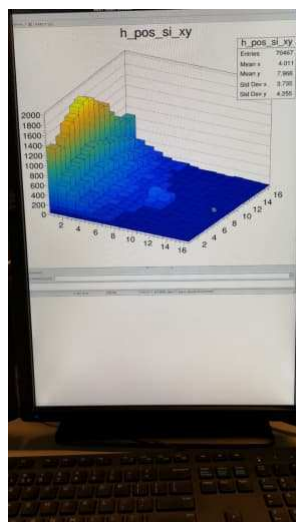
E127: Proton capture on ^{118}Te

	GE02DS3HG also works. ~0 – -12500 (negative direction)	11:33
JG	Jan Glorius Did you just move it?	11:33
UP	Ulrich Popp yes	11:33
JG	Jan Glorius Ok...	11:33
UP	Ulrich Popp with prophelper	11:33
JG	Jan Glorius To -100mm?	11:34
UP	Ulrich Popp now it is completely outside I can move it to 100mm	11:34 11:34
JG	Jan Glorius Yes, we are trying to move by event now and where slightly confused by your movement	11:35
UP	Ulrich Popp ah okay so I better log out :)	11:35
JG	Jan Glorius Did you move again? It's back to -100	11:35
UP	Ulrich Popp yes I moved it to .100 -100 but now I am logges out	11:35 11:36 11:36 11:36
JG	Jan Glorius 👍	11:36
YL	Yuri Litvinov Jan, we can continue	13:47
JG	Jan Glorius You can close	13:48

E127: Proton capture on ^{118}Te

- JG** Jan Glorius 15:31
Anyone in for the meeting 🤖
- E** Enis 15:32
I am 🤖
- JG** Jan Glorius 17:29
So we are on track again and just started the measurement with the scraper in position now. I will clear the online spectra now.
Now you should see a much clearer peak appearing. 17:31
- RR** Rene Reifarh 17:32
Congratulations!
Any news from FRS? 17:32
Starting tomorrow, right? 17:32
- JG** Jan Glorius 17:33
For the night shift (Benny & Philipp) the plan is to stay with this setting all the time. Enis & Pierre-Michel will give you the shift instructions. Call me in case of DAQ or detector problems.
- TS** Thomas Stöhlker 17:33
AAv3
- PE** Philipp Erbacher 17:35
In reply to [this message](#)
Alright 👍👍 let's hope that we don't need to wake you up :-)
- JG** Jan Glorius 17:36
In reply to [this message](#)
They were progressing, last i heard. We will see the vacuum tomorrow. The plan is still to give the beam to them at 8am.
This is also the reason why we skip the early shift tomorrow (17:37
[Diego](#) & [@dr_orf](#)). No need for you to come in. Beatriz et al. Will cover the 1 hour left.

- LV** Laszlo Varga 17:38



E127: Proton capture on ^{118}Te

👍😊 nice to see that this is meanwhile a well-established standard.
Despite the fact that no one else can do it. 🙄

JG

Jan Glorius

17:54

In reply to [this message](#)

That's true, but it is really time to change the reaction now.
 $^{124}\text{Xe}(p,g)$ is starting to make me feel bored a bit 😊

TS

Thomas Stöhlker

17:54



ID

Iris Dillmann

18:19

😊 Looking forward to see the pioneering "heaviest radioactive beam direct proton capture reaction" measured so far... 🙄 The previous "record" was 39K measured by DRAGON 🦖. Thanassis was a co-author, right?

TP

Thanassis Psaltis

19:19

Nope, that experiment was the year before I started grad school 🙄

YL

Yuri Litvinov

20:13

Do you have a picture with „scraper“. There should be quite some counts by now?

Jan, did you set the second scraper?

20:13

JG

Jan Glorius

20:16

No, i think we would need the comparison between one and two scraper measurements to draw a conclusion. But the time is too short to get this until tomorrow 8.

YL

Yuri Litvinov

20:16

In reply to [this message](#)

Indeed, Rene, last time we were excited to see it, and now it is „nothing special“

In reply to [this message](#)

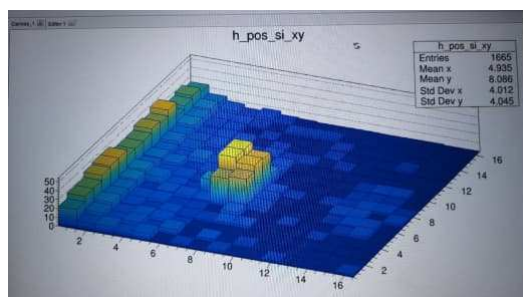
20:17

You are Right! Let see, may be we can do this with Te.

LV

Laszlo Varga

20:19



Last ~2.5h combined

20:20

JG

Jan Glorius

20:20

You can directly compare the cross sections of (p,g) and (p,n) here.
Wow

E127: Proton capture on ^{118}Te

Wunderbar!



- | | | |
|----|---|-------|
| YL | Yuri Litvinov | 20:21 |
| | Looks very good! | |
| LV | Laszlo Varga | 20:22 |
| | There is a bit of decreasing crap on strip $x = 2-6$ which i dont get super much right now | |
| | Might be only backscattered Rutherford, but this needs more ananalysis | 20:22 |
| JG | Jan Glorius | 20:24 |
| | Looks like fading-out of the forward scattering to me. Maybe the scraper effected is a bit smoother/uncleaner than we expected. | |
| LV | Laszlo Varga | 20:25 |
| | In reply to this message | |
| | Yes, i have this feeling also | |
| | Well, we can scrape more even | 20:25 |
| JG | Jan Glorius | 20:27 |
| | Maybe it is really worth to try putting the scraper a bit closer? | |
| LV | Laszlo Varga | 20:28 |
| | Yes, this is what i meant | |
| | 5mm more should still be fine i think | 20:28 |
| | So like 25mm away from the beam instead of.30mm | 20:28 |
| YL | Yuri Litvinov | 20:29 |
| | You can safely drive it to 2.5, that is 20 mm from the beam | |
| JG | Jan Glorius | 20:30 |
| | Yes, i guess the risk is very low, even for 20mm. | |
| | Laszlo, do you feel confident to do this? | |
| | With my guidance on the phone? | |
| LV | Laszlo Varga | 20:30 |
| | I am in the office right now | |
| | But give me like a 10min and i am ready | 20:31 |

E127: Proton capture on ^{118}Te

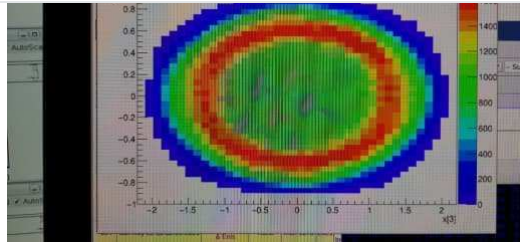
E	Enis	20:32
	We just stopped a run. Shall we wait until you adjusted the scrapers? Or shall we start a new one?	
YL	Yuri Litvinov	20:32
	Pierre-Michel is there	
JG	Jan Glorius	20:32
	Ah, yes	
	Can someone pic up the phone at the ESR panels in 2 minutes?	20:33
PH	Pierre-Michel Hillebrand	20:34
	yes	
JG	Jan Glorius	20:50
	Scraper is set to 20mm distance 👍	
	Online server spectra are cleared	
LV	Laszlo Varga	21:09
	I just quickly checked my simulations and the pg at the scraper position should reach around from 1cm to -1cm. So we are safe in this regard	
UP	Ulrich Popp	21:38
	What happend with the gastarget? It actually has $\sim 4 \cdot 10^{14}$ Particles/cm ² ?	
TS	Thomas Stöhlker	21:38
	???	
UP	Ulrich Popp	21:39
	the whole day. Was it planned? ;)	
JG	Jan Glorius	21:39
	We did nothing...	
UP	Ulrich Popp	21:39
	OK	
	aah! haha my fault	21:40
TS	Thomas Stöhlker	21:40
	was it really $4 \cdot 10^{14}$?	
UP	Ulrich Popp	21:40
	wrong gas was switched. All correct, $1 \cdot 10^{14}$.	
LV	Laszlo Varga	21:41
	We didnt see change in the online monitor	
	Remained $1 \cdot 10^{14}$	21:41

E127: Proton capture on ^{118}Te

- TS** **Thomas Stöhlker** 21:42
ahhh 😊
- UP** **Ulrich Popp** 21:42
yes. 1×10^4 . All correct.
- TS** **Thomas Stöhlker** 21:46
this is really remarkable. Such high density and such a stable operation. Really great!
- LV** **Laszlo Varga** 21:57
In reply to [this message](#)
A quick question to the pn. Since it is visible in our spectrum already, should not we aim for the measurement of it as well at 7MeV? For this maybe we should move the detector like 2 strips (0.6cm) away from the beam to completely catch all pn events
- JG** **Jan Glorius** 21:58
What does the simulation say, how big is the cone theoretically?
- LV** **Laszlo Varga** 21:59
This i have to simulate right now. About 7mev pn i didnt dream before
But judging from the histogram i would say two.more strips 22:00
To be safe 22:00
- JG** **Jan Glorius** 22:03
Well, i guess, you can move it if really want. However, one cannot trust the shape visible at this statistics...

Personally, i think we can extract the (p,n) cross section in the current position.
- LV** **Laszlo Varga** 22:08
So
I quickly made a simulation. It says that 1 more strip movement would be maybe enough to.cover completely 22:10
But now we are much sensitive range with the simulation also. 22:10
Just above the pn threshold
So the uncertainty is hard to tell 22:11
Even with the current position we should be pretty much good 22:11
- JG** **Jan Glorius** 22:13
Yes, and we can simply add all runs with this Detector position for analysis. Even when the scraper was moved.
- LV** **Laszlo Varga** 22:13
Hmm
I just checked the pn at the scraping position and it is exctly 2cm 22:14
away from the axis

E127: Proton capture on ^{118}Te



For the g.s.

22:16

JG

Jan Glorius

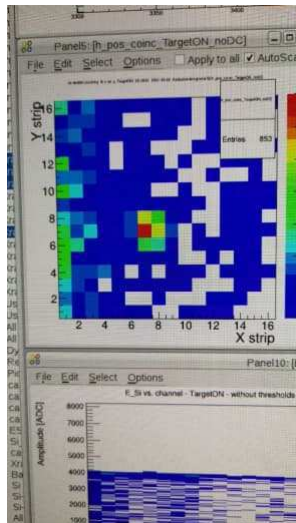
22:17

Mh, shall we go to 25mm scraper position? Now or never.

LV

Laszlo Varga

22:18



The background now of course improved for the pg, it seems

22:18

I would move to 25mm with the scraper

22:19

JG

Jan Glorius

22:20

Then do it. Pierre-Michel should know what to do.

LV

Laszlo Varga

22:20

Yes

JG

Jan Glorius

22:24

It should be 7.5 in absolute position then, right?

LV

Laszlo Varga

22:25

Yes

We just did

22:26

And started a new run

22:26

Cleared the online [si.map](#)

22:26

JG

Jan Glorius

22:26



RR

Rene Reifarh

23:18

You think, the small area to the right of (p,g) is (p,n) ? The area is so constrained because we are close to threshold, hence almost no recoil?

E127: Proton capture on ^{118}Te

LV

Laszlo Varga

23:20

In reply to [this message](#)

Yes, it should be the pn since the center of the pg and the pn distributions were typically 2cm away from each other

Which is the case seemingly for what we see

23:20

RR

Rene Reifarh

23:21



LV

Laszlo Varga

23:21

Regarding the size of the pn as you said, we are closer to threshold hence smaller cone

23 May 2021

B

Beatriz

08:09

We have given the beam to the FRS.

JG

Jan Glorius

08:09

👍 nothing to report from the night?

PE

Philipp Erbacher

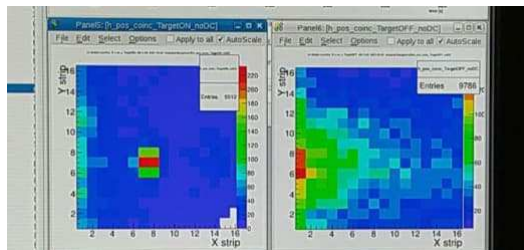
08:11

Some of the magnets shut off during the shift change at about 23:00 .
Worked again after a reset :-> the rest of the night was rather uneventful

MS

Michele Sguazzin

08:11



JG

Jan Glorius

08:12



B

Beatriz

08:12

Our 1h shift went very smoothly!

RR

Rene Reifarh

09:09

In reply to [this message](#)

(p,g) is crystal clear. Not sure, if we can trust the (p,n) yet. Very nice!

TS

Thomas Stöhlker

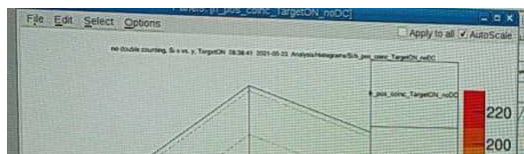
09:10

wow, looks really very nice!

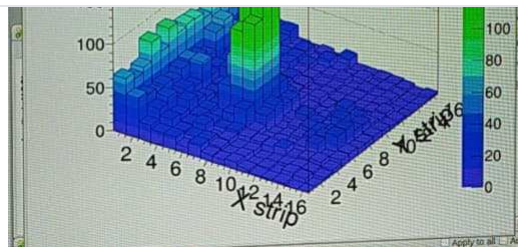
MS

Michele Sguazzin

09:44



E127: Proton capture on ^{118}Te



To better see the (p,n)

B

Beatriz

09:51

The Ge are being filled automatically now. Should we write or look at something? I think we should write the weight right?

TS

Thomas Stöhlker

09:52

usually one should stop the acq since filling may produce a lot of noise

B

Beatriz

09:53

Yes we stopped the DAQ at 8:00 already.

JG

Jan Glorius

09:53

I did filling remotely 1 hour ago.
Don't worry, all is done

TS

Thomas Stöhlker

09:54



B

Beatriz

09:54

Ok!

RC

Ruijiu Chen

14:58

I am on duty today. I am sorry i will be 20 min late.

LV

Laszlo Varga

14:59

Arent your shift cancelled?

RC

Ruijiu Chen

15:00

I don't know. I did not receive any emails about this.

JG

Jan Glorius

15:13

I am sorry, i didn't communicate today.

All shifts until Monday night are cancelled for now.

15:13

Sorry again, Ruijiu & Alex.

15:14

E

Enis

15:16

In reply to [this message](#)

Sorry just to be clear, the shifts continue from Monday 23:00 onwards?

JG

Jan Glorius

15:21

Yes, exactly. Sorry for being not clear.

Sergey Litvinov

E127: Proton capture on ^{118}Te

- JG

Jan Glorius
I also won't be able to join the meeting today. Maybe someone could report on FRS status?

15:23
- SL

Sergey Litvinov
Can one send the link for the meeting?

15:23
- JG

Jan Glorius
In reply to [this message](#)
This one

15:25
- RC

Ruijiu Chen
there is no beam and nobody in HKR. what is wrong with experiment?

15:28
- CS

Cobus Swartz
In reply to [this message](#)
We're having the zoom meeting now.


15:33
- RC

Ruijiu Chen
Alex and i got it. No problem. we are going to leave. Do we have meeting today? If there is a meetin, could you please send me the link?

15:33
- CS

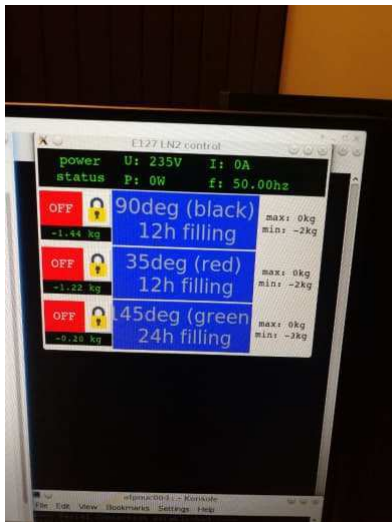
Cobus Swartz
In reply to [this message](#)
The link is in Jan's last message.

15:34
- RC

Ruijiu Chen
 Sticker

15:35
- RC

Ruijiu Chen
This is the status of N2 cooling sysyem. One of the detectot is going to minimum.

16:00
- 

16:00
- should we fill the Ge detector or target?

16:01
- Thomas Stöhlker**

E127: Proton capture on ^{118}Te

JG	Jan Glorius No need to fill! I did this morning, Laszlo will do this evening The weight is not very well calibrated. -0.8kg is full for the 90 degree detector	16:06 16:07
TS	Thomas Stöhlker but the controls should work	16:07
RC	Ruijiu Chen what about the LN for target?	16:08
JG	Jan Glorius Don't worry, we have things under control. Target was filled late yesterday, Laszlo will fill it later.	16:09
HW	Helmut Weick Hi Yuri, Are you on Zoom of E127?	16:10
YL	Yuri Litvinov Was a few min ago I'll be at GSI in 15 min	16:11 16:11
RC	Ruijiu Chen ok. We got it. We are going to leave HKR. Thanks.	16:14
JG	Jan Glorius 👍 thanks Ruijiu	16:15
RC	Ruijiu Chen You are welcome.	16:23
JG	Jan Glorius In reply to this message Just to clarify, we cancel the shifts because the FRS is being tuned for us. This was the original plan and is actually a good sign.	16:57
YL	Yuri Litvinov Yeap, but I would like to ask the morning and afternoon shifts of tomorrow to be ready to come in case we are faster tonight. We will cancel/confirm in the night... The beam at the FRS is well advanced Surely, to get it to the ESR will take some time	16:59 16:59 17:00
JG	Jan Glorius I have to apologize, there was a misunderstanding between Yuri and me. For now we cancel the shifts until tomorrow 7:00am. The shifts tomorrow morning and afterwards might be needed in an optimistic forecast.	18:32

E127: Proton capture on ^{118}Te

YL	@Jan, could you please check whether ^{120}I is a serious contaminant for us.	
YL	Yuri Litvinov We have ^{118}Te at 7 AMeV! There will be the morning shift!	04:44 04:44
SL	Sergey Litvinov Jan should come immediately 😊	04:45
YL	Yuri Litvinov About 2×10^5 particles per shot stored.	04:46
YL	Yuri Litvinov The beam at DSSSD is at -25 mm (absolute). This is very much inside. The question is whether we shall remove the bump and move it to -40 mm as before? We leave now! What is left is to decide on bumps, set up the target overlap, and run... In case there are complications with setting the bumps, please call me...	05:12 05:21 05:22
JG	Jan Glorius How do I set the bumps, which devices to use?	05:26
YL	Yuri Litvinov When can you come? I can wait still a bit	05:29 05:29
JG	Jan Glorius In reply to this message Which charge state? $52+$?	05:29
YL	Yuri Litvinov $52+$ Please forget this – we have a clean beam HF picks up very selectively only our line May be, we shall make a short TCAP run to have an overall picture Ruijiu and Ragandeep, could you record a few cycles. This will make many nice figures	05:30 05:30 05:30 05:31 05:32
JG	Jan Glorius Okay, i am at GSI in about 35 minutes.	05:32
YL	Yuri Litvinov Excellent!	05:33
	Ragandeep	

E127: Proton capture on ^{118}Te

RC

Ruijiu Chen

07:51

sorry. I just see the message.

RR

Rene Reifarh

08:13

In reply to [this message](#)

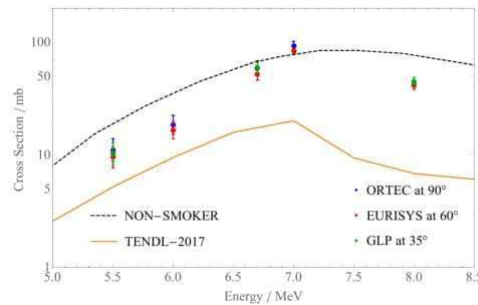
Congrats!! This is the first true FAIR (Phase-0) experiment in our (p,g) campaign. Dreaming of it since 2007 ... 😊

RR

Rene Reifarh

08:50

If I'm not mistaken, we should see around 0.2 cts / s for a cross section of 10 mb. ~5000 cts /shift @ 10 mb



08:55

Here is what we saw with Xe back in '16:

JG

Jan Glorius

09:18

Now, we are sharing beam with HTD. This seems to have some influence, beam is barely visible on the schottky at 7mev and the stacking steps are also not very clear to see on the Trafo anymore.

We still struggle to make a target overlap...

09:18

JG

Jan Glorius

11:18

We are in production with ^{118}Te now. However the conditions are not perfectly optimized. Target overlap is there, since we see xray peaks emerging. but the rate per second is negligible and we cannot optimize the overlap.

The parallel beam to HTD costs us at least half of the intensity... 11:19
But this was expected i guess.

RR

Rene Reifarh

11:21

"parasitic" mode ... nomen est omen.



11:21

JG

Jan Glorius

11:22

I have hope that tomorrow we will get another optimizing look by our ESR guys and for stoc. Cooling. Then let's see 🤞

UP

Ulrich Popp

11:23

Is it too difficult to adjust the beamline in the target section?

RC

Ruijiu Chen

11:24

Maybe the emittance of secondary beam is much larger than the primary beam.

Jan Glorius

E127: Proton capture on ^{118}Te

This is similar to last year...

- UP** **Ulrich Popp** 11:32
ah okay
- YL** **Yuri Litvinov** 11:39
Jan, how much do we get per spill?
- PH** **Pierre-Michel Hillebrand** 11:39
would it help to change the time binning of your rate histograms?
- YL** **Yuri Litvinov** 11:39
You can do e.g. 20 stacks ...
- JG** **Jan Glorius** 11:40
In reply to [this message](#)
We start at $8e5$ and have $1.1e6$ after 5 stacks.
- LV** **Laszlo Varga** 11:42
In reply to [this message](#)
If we can trust in lassie. We are at the sensitivity limit
- YL** **Yuri Litvinov** 11:42
This would mean $6e4$ per stack, which is a factor >3 as without the HTD
- JG** **Jan Glorius** 11:43
In reply to [this message](#)
Yes, but we always have 2 HTD spills in-between our injections and have to wait a bit. This makes stacking a bit less efficient.
- YL** **Yuri Litvinov** 11:45
When did they start? Before I left, we had reasonable conditions, right?
- JG** **Jan Glorius** 11:45
They started at 8 am or so.
- The difference is obvious, they switched off Shortly and the good condition was back 11:46
- In reply to [this message](#) 11:46
Daniel said he would be available for the noon meeting today.
- YL** **Yuri Litvinov** 11:47
Ok
- In reply to [this message](#) 11:47
Green
- Grrrh 11:48

E127: Proton capture on ^{118}Te

Right. the CBM is the parasite hurting/killing the host (us)

TS

Thomas Stöhlker

12:01

Is there a noon meeting today?

JG

Jan Glorius

12:03

In reply to [this message](#)

A non-official one I think. But yes

YL

Yuri Litvinov

12:09

I sent an email to Daniel and Christian.... let see what can be done.

Last year, CBM was running parallel to 205Tl experiment and we had to switch them off during accumulation phase. This was fine since afterwards we measured for several hours, but now(((

YL

Yuri Litvinov

12:29

One full day today and another one on Saturday or so...

CBM has presently 8 seconds extraction time. If they increase to 10 seconds, do you think our request gets in?

JG

Jan Glorius

12:34

In reply to [this message](#)

I do not understand this issue too well i have to say... We need to compare their extraction time to our time between the injections?

YL

Yuri Litvinov

12:34

CBM will change now to 10 seconds. Please have a look whether they still get 2 spills in between our stacks.

JG

Jan Glorius

12:35

Will do

With 20 stacks we reached 1.65×10^6

YL

Yuri Litvinov

12:37

So 6×10^5 in 15 stacks, not much.... (I compare to the number you wrote above)

TS

Thomas Stöhlker

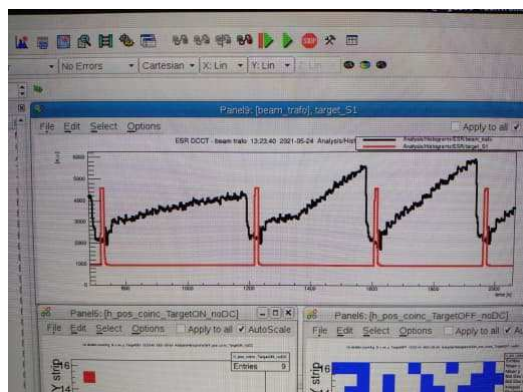
12:39

Puhhh, sounds like CRYRING

JG

Jan Glorius

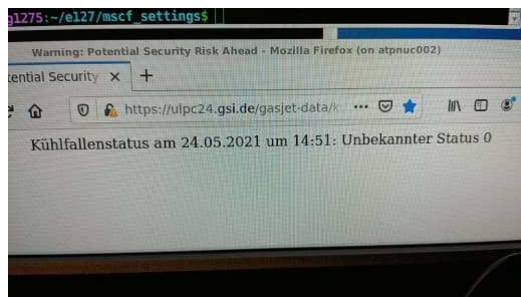
13:24



E127: Proton capture on ^{118}Te

in the middle they switched off

- RR** **Rene Reifarh** 13:46
That is a very clear plot. Thanks Jan.
- JG** **Jan Glorius** 13:48
Props go to Mario, i just made the foto. 📷
- RR** **Rene Reifarh** 13:48
Dream team. 😊👍
- TS** **Thomas Stöhlker** 13:57
Looks really great👍
- YL** **Yuri Litvinov** 14:06
Jan, you should first decide on the position of dass
Dsssd 14:06
Without bump, the overall storage was better, with the bump we 14:07
were entering into a resonance
The bump was very close to 1:1, that is 1 mm bump 14:08
corresponding to 1 mm beam shift
- JG** **Jan Glorius** 14:09
Okay, we will try reducing the bump from -20mm to -10mm and see
- JG** **Jan Glorius** 14:53
@HoSnoopy we have a new status of the trap in ESR 14:53

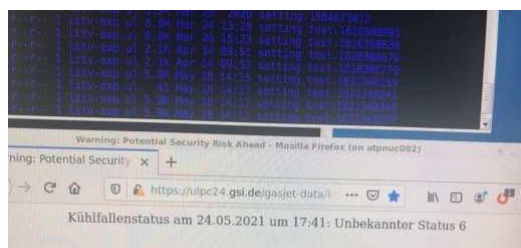


Shall we go in and check? 14:53

- UP** **Ulrich Popp** 17:45
"Kühlfallenstatus am 24.05.2021 um 17:43: Alles ok, Pumpe ist im Standby"

I just came home :) 17:46

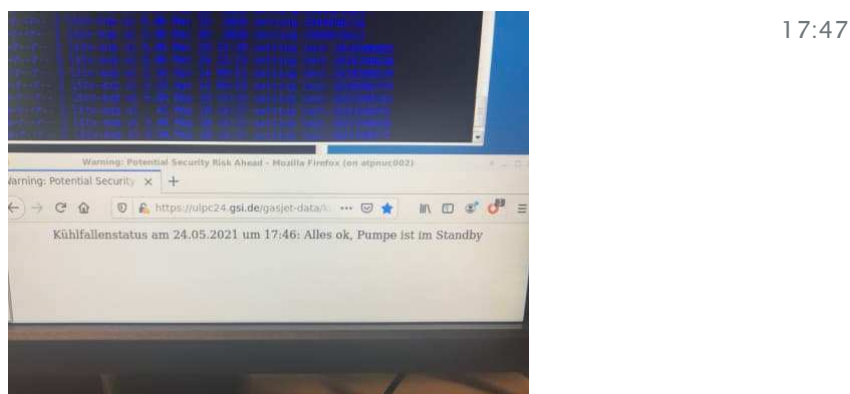
- PH** **Pierre-Michel Hillebrand** 17:46
Should we do something ??



E127: Proton capture on ^{118}Te

UP **Ulrich Popp** 17:46
maybe it is empty, but not yet critical? ;-]

PH **Pierre-Michel Hillebrand** 17:47
Better now!



UP **Ulrich Popp** 17:47
The problem is that norhof never gave us an "API" for its pump, so we had to look by try and error ...

tomorrow I have to refill it 17:47

maybe somebody earlier 17:48

PH **Pierre-Michel Hillebrand** 17:48
how do we know?

UP **Ulrich Popp** 17:48
if it is peeping inside you have to refill it ;)

normally it should be monitored 17:49

JG **Jan Glorius** 18:43
this is the big dewar which fills a smaller one for the trap, right?

We have a similar dewar outside ESR, which is full and could be quickly exchanged. 18:44

PH **Pierre-Michel Hillebrand** 18:50
I hear a peep every 30 s from outside ESR, is it that?

JG **Jan Glorius** 18:51
Yes, that's it...

I guess we need to exchange it. 18:51

LV **Laszlo Varga** 18:52
Should i go as well , Pierre-Michael?

JG **Jan Glorius** 18:55
It's not complicated.
1. Have ESR opened in TSG, with the big gate
2. Take the big dewar outside the lab to inside.(The one with the

E127: Proton capture on ^{118}Te

1. Make sure there is no ice on the new dewar's flange (use heater if needed)

5. Slowly lower the pump into the new dewar and seal it.

@ulli: any reset needed?

YL	Yuri Litvinov	18:55
	Please talk to the operators on how it is the best to do TSG	
	We need Strahlenschutz Rufbereitschaft	18:56
JG	Jan Glorius	18:56
	Mh, yes...	
UP	Ulrich Popp	19:03
	maybe switch off and on (green button)	
JG	Jan Glorius	19:13
	Is this going to be okay, are you guys handling this?	
	In case of Problems i can come in, But only around/after 21:00	
UP	Ulrich Popp	21:05
	"Kühlfallenstatus am 24.05.2021 um 20:49: Pumpe pumpt gerade"	
	"Kühlfallenstatus am 24.05.2021 um 21:04: Alles ok, Pumpe ist im Standby"	21:06
	Sounds good :)	21:06
LV	Laszlo Varga	21:06
	20:21 Alles ok, pumpe ist im Standby	
	Density is again e14	21:06
	In reply to this message	21:07
	Sorry i meant 21:06	
UP	Ulrich Popp	21:08
	The hydrogen goes all the time through the nozzle, there is always a jet, but it is interrupted by a small sheet of metal	
JG	Jan Glorius	21:09
	In reply to this message	
	Nice job Pierre-Michel & Laszlo 👍	
	Thank you very much and sorry for the dewar confusion, my fault 🙇	
SL	Sergey Litvinov	21:24
	What about data? Do you see pgamma?	
LV	Laszlo Varga	21:24
	In reply to this message	
	I remember like 7counts	
	Already enough for a phd	21:25
	Enis	

E127: Proton capture on ^{118}Te

SL

Sergey Litvinov

Thanks, and scattering is cut?

21:26

LV

Laszlo Varga

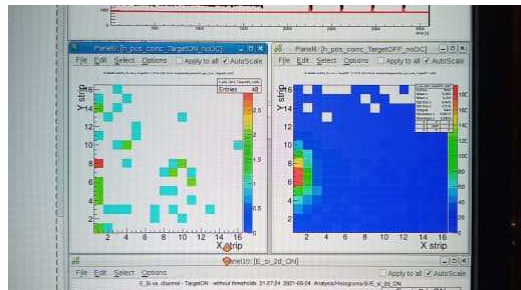
Yes, looked fine. Enis, maybe make a picture?

21:27

E

Enis

21:27



SL

Sergey Litvinov

In reply to [this message](#)

Yes, that's nice.

21:28

25 May 2021

LV

Laszlo Varga

00:40

I just quickly analysed what is the optimal setting regarding the number of stacking (and measurement time). To do so i looked at the number of counts in the KREC peak measured with the 90deg HPGe. I couldnt exclude all effects, but it seems that the 10 and 20 stacking with 11 sec targetON phase are rpuhly the same. However, the 30stacks + 3x5.5sec targetON phase is convincingly better, roughly like 1.5times more counts than in the previous two.cases. not sure though is this the effect of somehing else.

In conclusion, i would.keep measuring with the current settings, 00:41 so 30stack, 3x5.5sec targetON

RR

Rene Reifarh

00:42

Thanks for the swift analysis! 😊

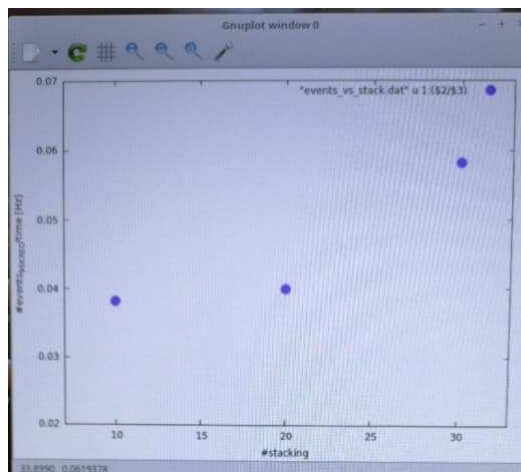
Ho many counts did you see?

00:43

LV

Laszlo Varga

00:43



E127: Proton capture on ^{118}Te

RR

ah, here it comes. 😊 thanks.

LV

Laszlo Varga

00:44

Y-axis KREC counts at 90deg /measurement time

Roughly

00:44

I didnt look precisely when was beam and when not

00:44

CS

Cobus Swartz

00:47

Okay. I guess then we'll stick to the same settings.

LV

Laszlo Varga

00:47

Yes, please continue like this

At least i dont see reason to change anything else

00:48

RR

Rene Reifarh

00:48

Yes. 😊

CS

Cobus Swartz

00:52

Noted. We now see 11 counts in the p,gamma region.

LV

Laszlo Varga

00:53

👍 keep collecting 😊

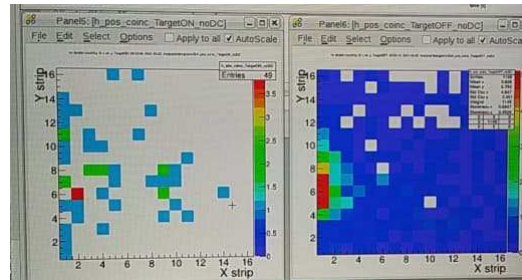
Can u make a picture?

00:53

MS

Michele Sguazzin

00:54



LV

Laszlo Varga

00:55

In reply to [this message](#)

Ah, the histos were cleaned for the 30stack settings, right.

?

00:55

CS

Cobus Swartz

00:55

I believe so. We weren't here at the time though.

LV

Laszlo Varga

00:56

Anyhow, we have the data 😊

E

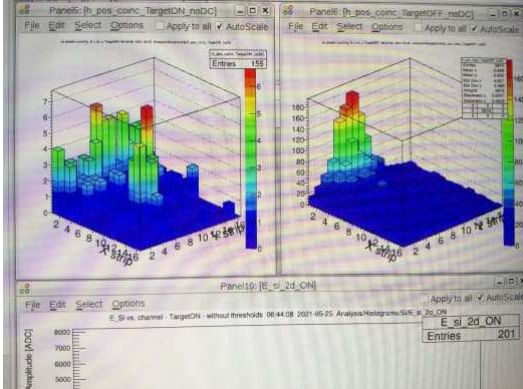
Enis

00:56

In reply to [this message](#)

Yes they were

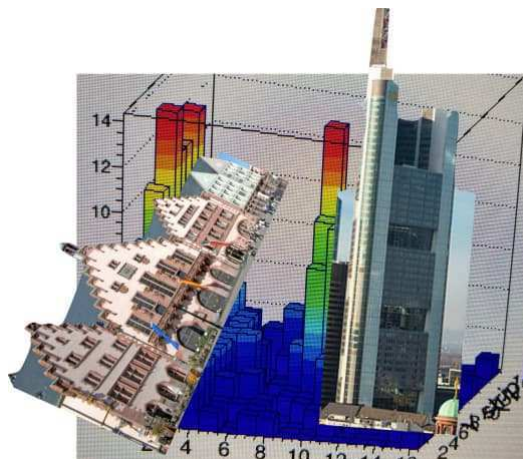
E127: Proton capture on ^{118}Te

- CS** **Cobus Swartz** 00:57
I agree. We'll post another picture in the morning.
- LV** **Laszlo Varga** 00:57
👍
- RR** **Rene Reifarh** 00:58
only, if you see (p,g) !!! 😊
- CS** **Cobus Swartz** 06:44

Good morning! ☀️
- D** **Diego** 06:58
Hi all. I just arrived at GSI for the shift, but I probably got lost. Which is the right building? First at time at GSI...
- OF** **Oliver Forstner** 07:07
Where are you now?
- MS** **Michele Squazzin** 07:08
Hi Diego, if you need we can meet at the welcome office
- D** **Diego** 07:08
At the registration
Yes please 😊 07:09
Thank you! 07:09
- OF** **Oliver Forstner** 07:18
In reply to [this message](#)
Hi Diego,
Did you manage or still lost?
- RR** **Rene Reifarh** 08:24
In reply to [this message](#)
Amazing – it is so clean, one can basically count by hand. ~25 cts / 6 hours ... duty-cycle strikes back ...
- YL** **Yuri Litvinov** 13:17
Do we need to bring anything into the ESR? It can be open for 1 hour.

E127: Proton capture on ^{118}Te

Robert Grisenti joined group by link from Group

- RG** **Robert Grisenti** 18:15
Some more patience... still optimizing
- RG** **Robert Grisenti** 18:43
All quadrupols have failed right now!
The on-call service has to come 18:45
- RR** **Rene Reifarh** 18:48
🤖
- SS** **Shahab Sanjari** 18:48
can take up to 30 min
Юрий A. says, not up to, but at least 18:49
Robert is wondering.... 18:51
- SL** **Sergey Litvinov** 18:53
who is in hkr now?
- SS** **Shahab Sanjari** 18:53
mr bombastik
- SL** **Sergey Litvinov** 18:54
what kind of error&
? 18:54
- SS** **Shahab Sanjari** 18:54
The electrical current which is needed to supply the magnets is cut
- SL** **Sergey Litvinov** 18:59
thanks
- SS** **Shahab Sanjari** 19:33



We discovered,.... Frankfurt!

Tino Morgenroth joined group by link from Group

E127: Proton capture on ^{118}Te

You have to improve your photoshop skills 😊. But indeed

SS

Shahab Sanjari

19:37

sometimes you gotta be quick with results....

the magnet guy just arrived.

19:42

he is taking a look at ESR magnets

19:42

19:44



TS

Thomas Stöhlker

19:46

I like this image of Frankfurt 😊. Looks great 🍷

RG

Robert Grisenti

20:28

Quadrupoles are on again... 😊

LV

Laszlo Varga

20:29

Please dont start to measure yet, xrays are getting filled with LN2.
Needs 3mins roughly

RG

Robert Grisenti

20:30

OK

Let me know when you are ready

20:30

They have to optimize anyway....

20:31

LV

Laszlo Varga

20:42

Xrays are filled, if possible, start the measurement. Sorry for the pause.
I come to HKR

SS

Shahab Sanjari

20:43

markus still working

markus is finished

20:44

we would now start the LMD file

20:44

LV

Laszlo Varga

20:44

Ok

SS

Shahab Sanjari

20:45

after that I do lifetime measurements

E127: Proton capture on ^{118}Te

we are getting new counts now 20:51

this shot was not so strong, markus still looking at the cooler voltage 20:51

YL

Yuri Litvinov

21:33

How does it look now? Do we have higher rates?

JG

Jan Glorius

21:34

Slightly higher than before, but only 20 instead of 30 stacks

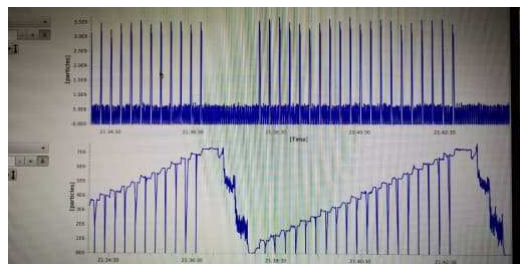


21:34

LV

Laszlo Varga

21:44



YL

Yuri Litvinov

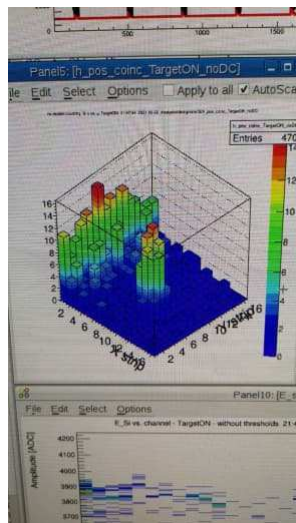
21:45

Skyscraper grows?

LV

Laszlo Varga

21:47



Slowly, but monoton

But in general we have indeed higher rates 21:48

RR

Rene Reifarh

21:49

We can probably go to a lower energy tomorrow, right?

YL

Yuri Litvinov

21:49

Shall decide in the afternoon

RR

Rene Reifarh

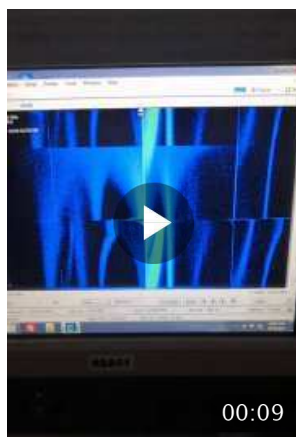
21:49

Sounds good.


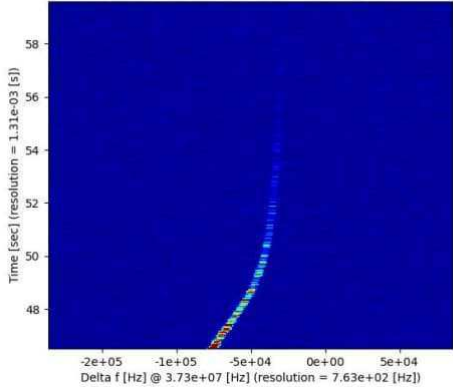
Yuri Litvinov

E127: Proton capture on ^{118}Te

- JG** Jan Glorius 21:50
👍
- RR** Rene Reifarh 21:50
😊
- YL** Yuri Litvinov 21:52
Having several stacks improves the stability of the SIS intensity... we are very stable at $3e9$. Talked to operators, there is not much they can do to improve further
- RR** Rene Reifarh 21:55
It's amazing. How long did it take to get the plot above?
- JG** Jan Glorius 21:57
I think about 20 hours, maybe less.
- LV** Laszlo Varga 21:58
We have now scrapers everywhere. Rutherford scraper and skyscraper
😄
- YL** Yuri Litvinov 22:02
Today we lost nearly the entire day due to a planned 30 min intervention to SIS....
- TS** Thomas Stöhlker 22:03
😞
- SS** Shahab Sanjari 22:03
I will stop gas target for the next 2 cycles for lifetime measurements
each cycle is about 6 minutes 22:03
elog is update 22:04
- JG** Jan Glorius 22:06
Very good. Thanks
- YL** Yuri Litvinov 22:09
Please record also a few 410 MHz, full cycle, beautiful pictures... May be you can post the one you made a photo of))
- SS** Shahab Sanjari 22:10



E127: Proton capture on ^{118}Te

- YL** **Yuri Litvinov** 22:10
:-)
- TS** **Thomas Stöhlker** 22:10
cool!
- YL** **Yuri Litvinov** 22:11
One shall sell it to a discovery channel))
- TS** **Thomas Stöhlker** 22:12
This reminds about the ESR comets. Robert & Nikos you still remember 😊
- RG** **Robert Grisenti** 22:17
 **Sticker** 😊
- SS** **Shahab Sanjari** 22:30

- UP** **Ulrich Popp** 22:37
Thomas AFAIK the comets only appeared with the perforated sheet nozzle, not with the actual laval ("trumpet") nozzle.
- SL** **Sergey Litvinov** 22:37
In reply to [this message](#)
[Laszlo](#) is this with 2 scrapers?
- 26 May 2021
- TS** **Thomas Stöhlker** 00:51
Uli, sure but it was only a reminder 😊
- LV** **Laszlo Varga** 06:02
In reply to [this message](#)
No, only one
- SL** **Sergey Litvinov** 08:23
when do you want to change to 6 MeV/u

E127: Proton capture on ^{118}Te

Status: 1 h break, source filament needs to be changed.

08:32

JG

Jan Glorius

09:17

@HoSnoopy do you take care of the target filling tasks until Friday?

UP

Ulrich Popp

09:45

ah not today!

tomorrow and friday

09:45

LV

Laszlo Varga

09:45

Ok

UP

Ulrich Popp

09:46

My daughter is ill and I have to take care of her

JG

Jan Glorius

09:48

No problem, take care of your family!

UP

Ulrich Popp

09:50

Target is running very good and the actuators afaik also 😊.

maybe I have to change the hydrogen bottle on friday. That maybe means less density for about 10minutes. But maybe it is enough inside. This I'll see tomorrow.

09:51

RR

Rene Reifarth

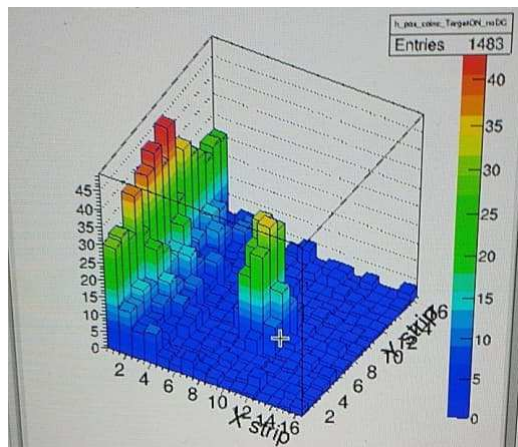
09:55

As if you were here and taking care. 👍

JG

Jan Glorius

10:15



250 – 300 counts

10:16

SL

Sergey Litvinov

10:16

When do we go to 6 MeV

MA

Marialuisa Aliotta

11:22

In reply to [this message](#)

this is fantastic! congrats! 😊

JG

Jan Glorius

11:35

We have a problem with the ESR cycle. There is a huge loss after

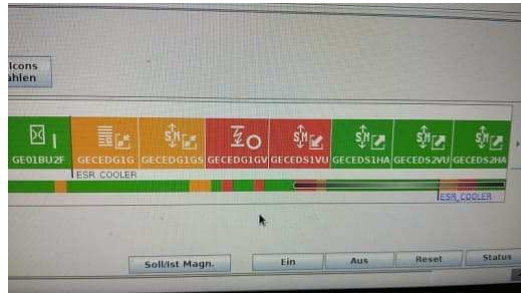
E127: Proton capture on 118Te

NO, it's the e-cooler

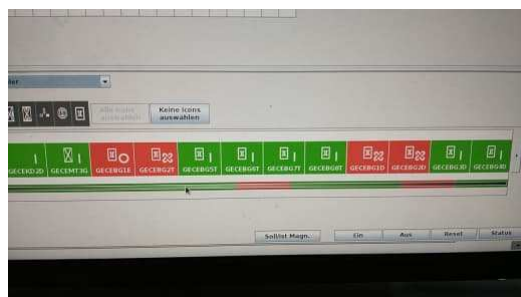
11:37



11:38



11:39



11:40

I think we should switch them back on?
ECENG1E...

The problem seems to be solved. Let's see

11:48

YL

Yuri Litvinov

12:09

I wrote a note on how to switch it on. On a A4 page next to consoles

SL

Sergey Litvinov

12:10

stop the pattern, is important

Before you start any reset

12:10

JG

Jan Glorius

12:11

We are running again.

Thanks to yuris note 🙏

YL

Yuri Litvinov

12:11

I can come only in 20 min

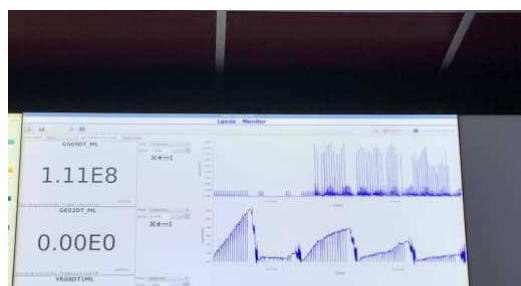
Excellent!!!

12:11

YL

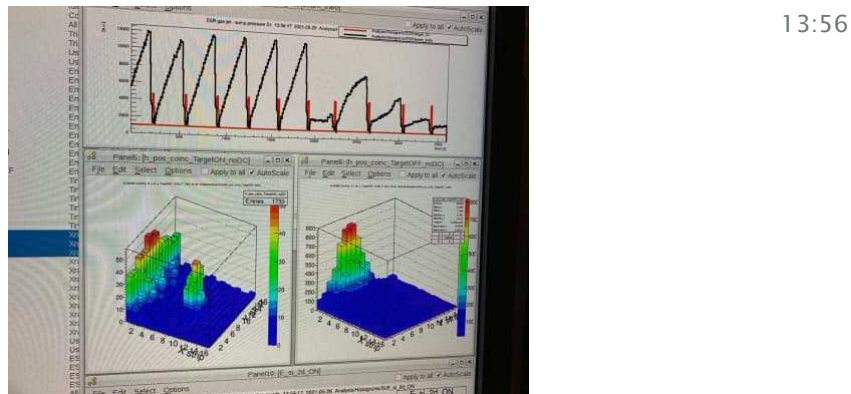
Yuri Litvinov

13:54



E127: Proton capture on ^{118}Te

The parallel operation with cave-C is not optimal... we adjusted the timing, but the intensity is now much lower than before... 13:55



TP

Thanassis Psaltis

14:31

Hallo! Could someone come pick me up from the front office?

LV

Laszlo Varga

18:33

We started to measure at 6 MeV

Lets collect some statistics to see if our settings are fine

18:33

JG

Jan Glorius

18:34



SL

Sergey Litvinov

19:08

cooler is down

R

Ragandeep

19:26

Data taking started again!

JG

Jan Glorius

20:31

Filling is ongoing

YL

Yuri Litvinov

20:32

Do we have a spectrum already?

JG

Jan Glorius

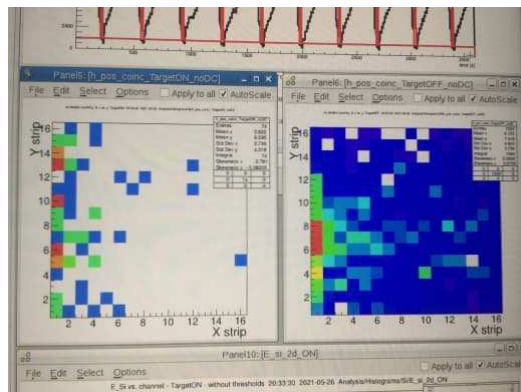
20:33

Probably a bit early...

R

Ragandeep

20:33



E127: Proton capture on ^{118}Te

YL

Hmmm

Let us wait.. at least it looks plausible that the setting is reasonable

20:35

JG

Jan Glorius

Filling is done. Please restart the data taking.

20:41

R

Ragandeep

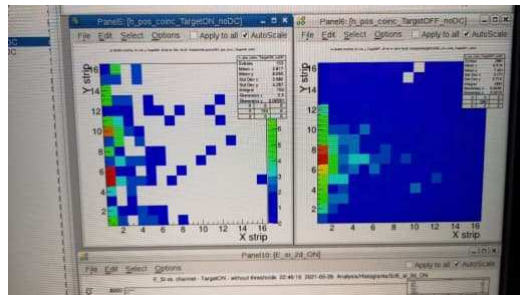
Ok

20:42

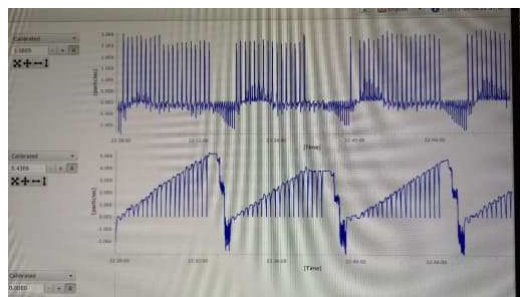
LV

Laszlo Varga

22:47



4–4.5h data, still hard to see anything. but our intensities are very low at esr



22:47

In reply to [this message](#)

22:48

Hard to say even

YL

Yuri Litvinov

Let us run over night and see in the morning.

22:50

RR

Rene Reifarh



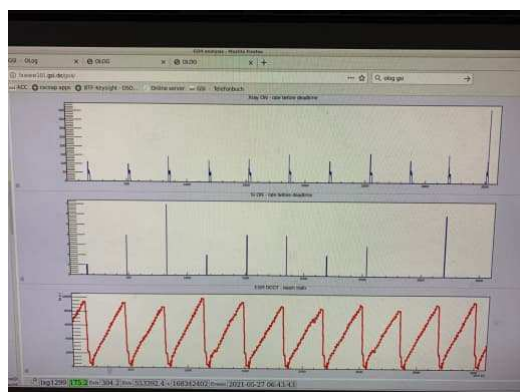
22:50

27 May 2021

YL

Yuri Litvinov

06:43



E127: Proton capture on ^{118}Te

I will move the target bump a bit 06:45

JG

Jan Glorius

06:46

Yes, it's worth a try. But I thought You did yesterday

YL

Yuri Litvinov

06:46

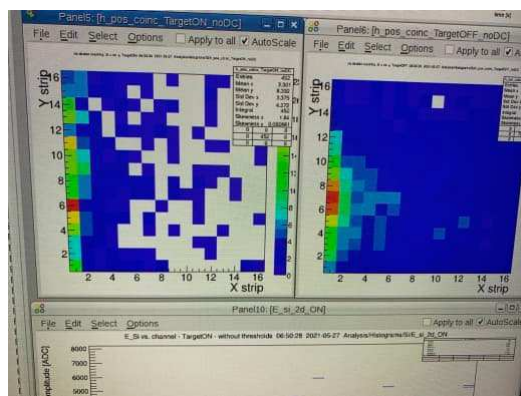
Yes, we did

Our diagnostics was the x-ray rate

06:47

Overall it is not yet consistent cause We have counts in the first dsssd strip 06:48

What should that then be? Backwards scattering? From what? It is tough to say whether our "target on" and "target off" pictures are qualitatively different 06:50



06:50

JG

Jan Glorius

06:56

Yes, this is hard now. But I guess we can only try to confirm settings and wait.

I think we have target overlap but cross section and luminosity don't allow 10h success 06:58

RR

Rene Reifarh

07:01

Do we see Te-x-rays during target-on?

YL

Yuri Litvinov

07:01

This Jan can check...

I do re-check the overlap and let it run further

07:02

JG

Jan Glorius

07:04

In reply to [this message](#)

We get a spectrum with the expected lines, yes.

RR

Rene Reifarh

07:05

Well... Then there must be overlap, right?

Do we know the position on the beam at the DSSD? Could that be different? 07:06

YL

Yuri Litvinov

07:07

Yes, it may well be. We thought to fine tune according to the p,g peak on the dssd))

E127: Proton capture on ^{118}Te

- JG** I don't believe that the position has changed much. The Si map spectrum shows
That Rutherford backscatter is on a comparable level than pg 07:08
- YL** **Yuri Litvinov** 07:09
There is always Merfi around, and it might well be that we just need higher statistics
I will do two more steps and if no visible improvements, will let it 07:10 run with set parameters
- RR** **Rene Reifarh** 07:11
Mmh. Can we compare the Te x-ray rate (cts per hour or so) with the situation at 7 AMeV?
- YL** **Yuri Litvinov** 07:12
We have a much lower intensity at 6 AMeV, we lose too much at the second ramp
- RR** **Rene Reifarh** 07:13
Ah. I see.
- JG** **Jan Glorius** 07:13
In reply to [this message](#)
We shall do a direct comparison... I will report as soon as I have values
- RR** **Rene Reifarh** 07:13
Then this is the main problem?!
Very good. Thanks Jan! This seems to be the only way to draw 07:14 solid conclusions.
- YL** **Yuri Litvinov** 08:23
We restarted the data taking
The overlap with the target was indeed not optimal 08:23
By shifting the beam from -11.5 to -12.8 mm, we gained a factor 08:24 of three rate on the DSSSD
May be 2.5 not 3 08:24
We adjusted the scraper 08:24
Looking at x-ray rate (quite tough to judge) and put it from +1 to 08:25 +2
For setting the detector position we have no good diagnostics 08:26
- RR** **Rene Reifarh** 08:27
1 mm change in beam position should not clear the (p,g) entirely. So maybe it was indeed mostly the (missing) statistics

E127: Proton capture on ^{118}Te

relaxed somewhat is the edge of the Rutherford

Next goal is to run and see in a few hours 08:30

RR

Rene Reifarh

08:30

back to "staring at the screen" again ... :D

YL

Yuri Litvinov

08:31

We clear the plot in the online "starring screen" and restart to starring

RR

Rene Reifarh

08:33



YL

Yuri Litvinov

08:52

We lose the beam after about 4 seconds at 6 AMeV. Probably also a kind of resonance that we fought at 7.

JG

Jan Glorius

08:52

Mh...

YL

Yuri Litvinov

08:52

Also, the x-ray rate is nearly independent from the number of stacks

RR

Rene Reifarh

08:53

In reply to [this message](#)

Even without H2-target on?

YL

Yuri Litvinov

08:53

We used 7 during optimization and 20 did not increase the intensity

In reply to [this message](#)

08:53

Yes

With the "resonance" at 6 AMeV I cannot do much. May be Sergey can help to modify tunes a little.

08:55

I suggest to go faster cycles for the time being until the slowing down is improved (if possible Surrey)

08:56

RR

Rene Reifarh

08:56

would 5.5 AMeV be better then? (sorry for the stupid question, don't understand this amazing machine all too well)

YL

Yuri Litvinov

08:56

Could well be, but could also be worse

RR

Rene Reifarh

08:57

just thought ... since we were running ^{124}Xe at 5.5 AMeV ...

YL

Yuri Litvinov

08:57

New control system – new reality

E127: Proton capture on ^{118}Te

- SL** **Sergey Litvinov** 08:58
In reply to [this message](#)
I cannot come today, i go to the hospital
- YL** **Yuri Litvinov** 08:58
Oki doki
- SL** **Sergey Litvinov** 08:58
It is hard to do something with a fragment beam, unfortunately
- RR** **Rene Reifarh** 08:59
Take care Sergey ... There's life beyond physics.
- SL** **Sergey Litvinov** 08:59
We already discussed it with Markus, that we did not optimise the deceleration to 6 MeV but only at 7
- YL** **Yuri Litvinov** 08:59
Alvarez is down((grrrh
- SL** **Sergey Litvinov** 09:00
With fragment beam, one can see only on the Schottky line whether it is more intense or not
- YL** **Yuri Litvinov** 09:00
It is understandable, Cepёxa
- SL** **Sergey Litvinov** 09:01
Just for you information))
- YL** **Yuri Litvinov** 09:02
We can switch to primary beam....
- RR** **Rene Reifarh** 09:07
that might be a good idea ... ^{124}Xe @ 6 MeV, optimize and than go back to ^{118}Te ... is it feasible in terms of human-power?
- YL** **Yuri Litvinov** 09:08
I do not know
- FRS is rather simple, but ESR is difficult 09:09
- RR** **Rene Reifarh** 09:09
yeah – that was my main concern ...
- well then maybe: faster cycles now and we discuss with Sergey & Markus as soon as they have time for a meeting? 09:12
- HW** **Helmut Weick** 09:29
do you need help for FRS?
- Yuri Litvinov**

E127: Proton capture on ^{118}Te

tell me when you want changes on FRS, good excuse to skip another meeting.



Just refilled LN2 on the ESR-roof, tomorrow a bottle change für H2 is necessary

Error at FRS!!! Somebody removed the degrader 30min ago. I will move it back in.

Oh... Can we get a more precise time for this removal?

Helmut, please add a note into logbook

13:07

It was already removed yesterday says the log file, whole night with other beam.

13:14

yes, yesterday 12:30 the degrader was removed. Now stacking gets more beam accumulated.

13.21

actually at 13:44.











Helmut, shall we check the degrader effect with another thickness?

There should be a clear effect, if the degrader really moves. But now we see nothing of this...

we can it, it is fast, but it was tested carefully with primary beam.

There was difference also today, more beam was accumulated 14:06

E127: Proton capture on ^{118}Te

-  In reply to [this message](#)
Yes, but it seems not to work as expected.
In reply to [this message](#) 14:06
Not really
-  [Helmut Weick](#) 14:09
we can test, just say when.
-  [Jan Glorius](#) 14:10
I stopped the DAQ, let's test
Are you moving degraders? 14:16
Otherwise I would restart data taking 14:17
-  [Helmut Weick](#) 14:21
no, only in direct contact, not by telegram.
-  [Shahab Sanjari](#) 15:08
In reply to [this message](#)
How is this possible?
Last year during the E121, 10 hours measurement someone also moved something in FRS we lost vacuum quality drastically 15:09
-  [Helmut Weick](#) 15:09
Maybe it was in an log file is wrong, because the controller crate was set to manual mode.
-  [Shahab Sanjari](#) 15:10
Grrrr
We have to find a way to prevent such mistakes 15:10
-  [Jan Glorius](#) 15:12
We don't get beam injected in ESR anymore. SIS shots are however still good at $2.6\text{e}9$
Can someone check FRS devices please 15:13
-  15:16
Is this an important magnet in ESR?
-  [Sergey Litvinov](#) 15:24
GEIT magnets are electron spectrometer. They should be off
but the GE0MU1 is a dipole 15:25
which should be always on 15:25

E127: Proton capture on ^{118}Te

if it is red, then important magnets are off 15:28

JG **Jan Glorius** 15:31
Okay, thanks. I think we are back in operation.

HW **Helmut Weick** 15:32
ok, FRS seems fine.

YL **Yuri Litvinov** 15:35
Jan, what about 15:30 meeting?

JG **Jan Glorius** 15:51
Sorry, we were busy at ESR panel...

ID **Iris Dillmann** 15:52
I think we just left the meeting. Assumed you were busy. Hope you have better news and data tomorrow 😊

UP **Ulrich Popp** 17:01
I just had to change the gas bottle (hydrogen). After I had to adjust the inlet pressure. I think it is okay now. I have to go for a meeting with a needle (vaccination :))

JG **Jan Glorius** 17:43
Cobus, Michele, is there a bigger problem? No beam for 30min...

CS **Cobus Swartz** 17:46
Yes, since 17:10 it's been off at the UNILAC.

JG **Jan Glorius** 17:46
Okay, so the operators are working on it, very good. Thanks

CS **Cobus Swartz** 17:47
Just got it back.

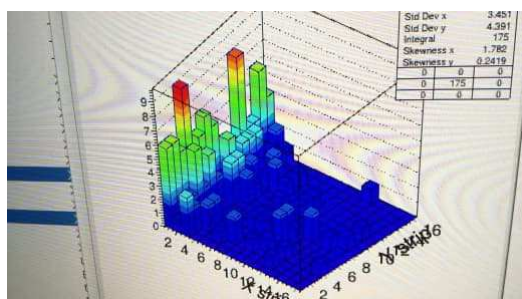
We have resumed data taking. 17:49

JG **Jan Glorius** 17:50
👍

RR **Rene Reifarh** 18:27
Do you see something in the center area of the DSSD? (p,g)

A few counts... Maybe? 18:27

CS **Cobus Swartz** 18:29



E127: Proton capture on ^{118}Te

KK

Aha! Very good!

Thanks!

18:29

(yesterday there was just nothing at all. Very suspicious.)

18:30

YL

Yuri Litvinov

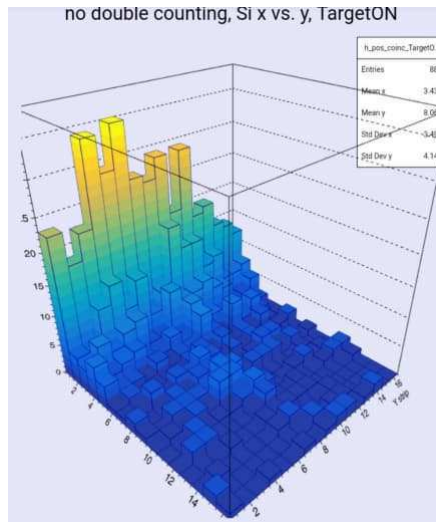
18:32

Hard work of the morning shift!

JG

Jan Glorius

18:33



YL

Yuri Litvinov

18:33

Please keep an eye that the ESR on the scheme above the console is blue and not red!!

JG

Jan Glorius

18:33

In the online go4 we have all counts for 6 MeV in the spectrum.

Slowly it starts looking as expected

18:33

CS

Cobus Swartz

18:35

EST picture on top monitor was red a moment ago.

It's blue again now after the operator switched on Ge01KP02 to 09, and 20 to 22.

18:36

YL

Yuri Litvinov

18:36

Excellent! Kp03 must stay off!

CS

Cobus Swartz

18:38

Noted. In the meantime we lost the beam in the SIS.

Beam is back.

18:49

E127: Proton capture on ^{118}Te

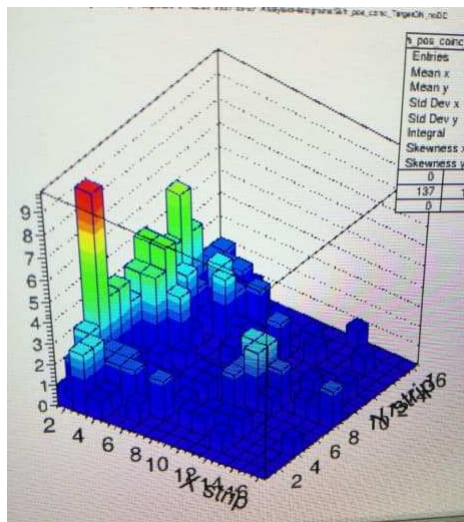


Fyi

CS

Cobus Swartz

21:43



(p,g) appears quite clearly now.

TS

Thomas Stöhlker

21:45

Wow, indeed something is growing 🍌

YL

Yuri Litvinov

21:45

Looks indeed promising)) if so, then the detector is closer to the beam than in 7 AMeV setting....

LV

Laszlo Varga

21:48

In reply to [this message](#)

By looking at the picture seems like 2mm closer

YL

Yuri Litvinov

21:49

But I would not move it now. Let us take as much statistics as possible.

LV

Laszlo Varga

21:49

In reply to [this message](#)

Yes, exactly

TS

Thomas Stöhlker

21:49

Golden rule: never put a solid state detector as close as 0 mm to the beam. I once did but I will not tell you about the result 😞

YL

Yuri Litvinov

21:50

Please keep an eye on the blue ESR Pictogram above the ESR console. If turned red, please inform the operators













CS

Cobus Swartz

21:54

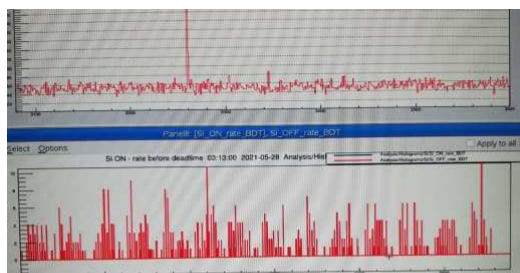
We are. It's still blue for now.

E127: Proton capture on ^{118}Te

	At least the stacking looks awful	21:55
	Cobus Swartz We know. They are looking at it.	21:56 21:56
	Jan Glorius Ah, much better 🤞	21:59
	Cobus Swartz Yes, it looks much healthier now.	22:02
28 May 2021		
	Sergey Litvinov KP 17–20 are off	00:11
	Mario Weigand Operators try to solve it	00:11
	Yuri Litvinov Restart the scu and send afterwards the whole context	00:12
	Sergey Litvinov does not help	00:12
	Yuri Litvinov If several are off, then the control unit hangs These get off pretty often	00:13 00:14
	Mario Weigand We have the impression since ESR is back online we don't see any p,g events anymore. But we don't see the problem... Anyone there?	03:00
	Laszlo Varga I am awake 😊 Well isn't the rate like less than few counts/hour? However, where you can judge more, I think, is the xray spectra If the krec peak grows at the right place	03:01 03:02 03:02 03:03
	Mario Weigand We didn't see one count on the Si in one hour if I'm not mistaken	03:03
	Laszlo Varga It means we have correct beam + target In reply to this message Hmm, are the histos rolling?	03:03 03:03
	Mario Weigand	

E127: Proton capture on ^{118}Te

LV	Laszlo Varga	03:04
	And neizher the xray peaks are growing?	
MW	Mario Weigand	03:04
	Now beam is gone. .	
LV	Laszlo Varga	03:05
	Than alert the operators	
	*then	03:05
MW	Mario Weigand	03:05
	They are already on it	
LV	Laszlo Varga	03:05
	👍	
	Hmm, few counts you should see anyhow on the Si spectra	03:06
	Ypu didnt see only for the target on spectra jn the last hour?	03:06
	Or also nothing for.the target off?	03:06
MW	Mario Weigand	03:08
	Not sure about that one, but nothing on Target on	
LV	Laszlo Varga	03:09
	Do.we have good target density?	
MW	Mario Weigand	03:09
	Yes	
LV	Laszlo Varga	03:10
	Also on the lassie you see the esr cycle?	
	I mean in the last hour	03:10
MW	Mario Weigand	03:11
	Yes	
LV	Laszlo Varga	03:11
	Than in principle we should be fine... hmm	
	Make maybe a picture of the si on/off histos	03:12
	And the 90deg krec peak	03:12
	And look at it in a half an hour again	03:12
MW	Mario Weigand	03:13



E127: Proton capture on ^{118}Te

LV

Laszlo Varga

03:15

In reply to [this message](#)

Hmm, it is hard to see in this. zoom the histo on the x axis maybe from 3300–3600

So last 5 min

03:15

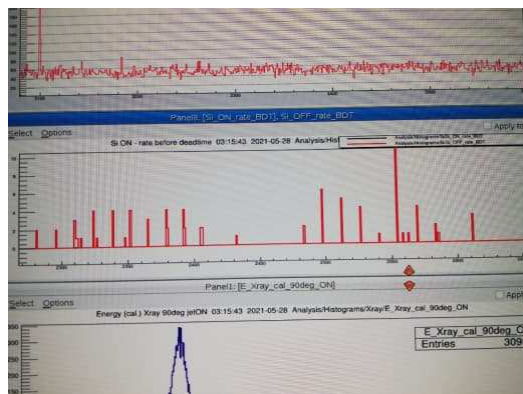
Or if there was no beam now, then maybe a bit more

03:15

MW

Mario Weigand

03:16



No Si on events

03:16

LV

Laszlo Varga

03:16

Hmm

esr cycle is running?

03:17

The pattern, and on the lassie you see it accordingly?

03:18

MW

Mario Weigand

03:19

We saw it while we had still beam

LV

Laszlo Varga

03:19

Hmm

Well

03:19

If we have target and beam as well then i am out of ideas

03:20

Beam intensities were roughly fine?

03:20

If have beam again, can you make a picture of the lassie monitor?

03:21

MW

Mario Weigand

03:21

Ok

LV

Laszlo Varga

03:27

Be sure that go4 is not frozen or something

Maybe try to check the rate monitor

03:27

Monitor when we have back the beam

03:27

In the target on phase the xray_bdt should show some numbers in the range of 110

03:28

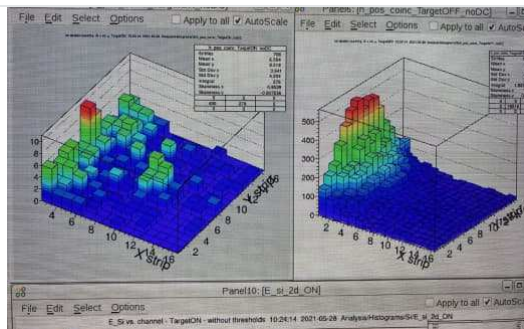
At least in the first second

03:28

E127: Proton capture on ^{118}Te

MW	No 😞	
LV	Laszlo Varga Yeah, i see iz on the online go4	03:37
	The xray rates in the target on phase were like 60, which is at the background level... super strange	03:39
	Like half an hour ago	03:39
MW	Mario Weigand Yes it was higher before the esr failure	03:41
	Just getting beam back	03:41
LV	Laszlo Varga Lets see	03:42
MW	Mario Weigand Now we had a target on event	03:44
	Looks better now for some reason	03:44
LV	Laszlo Varga Xray rates is like 90	03:45
	What i see at least	03:45
	We had 2 counts on the Si as well	03:45
MW	Mario Weigand Yes	03:45
LV	Laszlo Varga Maybe not pg but counts 🤔	03:45
	So	03:47
	110xray-bdtON	03:47
	Looks promising	03:47
MW	Mario Weigand 👍	03:47
LV	Laszlo Varga Acompanied with 4 counts on the Si	03:48
	So, hopefully the problem solved itself 😊	03:49
	Yeah, the new shoot looks good as well	03:50
MW	Mario Weigand I dont understand why, but apparantly it solved itself 😊	03:51
YL	Yuri Litvinov Could you please post the current 3D plots	10:23

E127: Proton capture on ^{118}Te



RR

Rene Reifarh

10:24

No beam right now. Had interruptions ...

YL

Yuri Litvinov

10:24

ESR blue?

RR

Rene Reifarh

10:25

Alvarez...

YL

Yuri Litvinov

10:25

((

RR

Rene Reifarh

10:53

Longer break expected. Problem not yet located, hence no estimate.

YL

Yuri Litvinov

10:53

grrrh... grhhh...

UP

Ulrich Popp

12:36

https://mastodon.popps.org/system/cache/media_attachments/files/106/308/385/340/300/943/original/b46d3aa1f2d8b22b.jpg (sorry, I couldnt resist)

LV

Laszlo Varga

12:37

In reply to [this message](#)

Classic 😊

RR

Rene Reifarh

15:36

No beam for the next 2–3 h (at least)

RR

Rene Reifarh

16:27

beam might be back ~5:30

R

Ragandeep

16:42

Beam is back 😊🙏

YL

Yuri Litvinov

16:43

One full shift(((

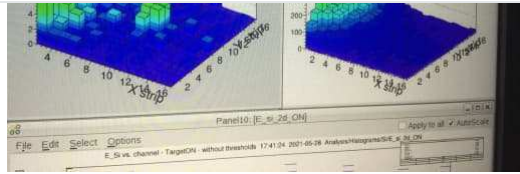
R

Ragandeep

17:42



E127: Proton capture on ^{118}Te



Rene Reifarh

Nice!

17:54

[Next messages](#)

E127: Proton capture on ^{118}Te

11 May 2021

Shahab Sanjari created group «E127: Proton capture on ^{118}Te in ESR 

Shahab Sanjari changed group title to «E127: Proton capture on ^{118}Te in ESR»

Shahab Sanjari converted this group to a supergroup

E127: Proton capture on ^{118}Te converted a basic group to this supergroup «E127: Proton capture on ^{118}Te in ESR»

Laszlo Varga removed Laszlo Varga



Laszlo Varga

15:49

Hi Everybody!

Shahab Sanjari changed group photo



Ragandeep joined group by link from Group

Rene Reifarth joined group by link from Group

Laszlo Varga invited Michele Sguazzin

Michele Sguazzin invited Cobus Swartz

Sophia Dellmann joined group by link from Group

Beatriz joined group by link from Group

Ruijiu Chen joined group by link from Group

12 May 2021

Marialuisa Aliotta joined group by link from Group



Jan Glorius

15:55

There is a serious power failure in ESR just now. No vacuum readouts. Maybe we have a bigger problem... Let's see



Yuri Litvinov

15:58

Oooh(((









Sergey Litvinov

16:09







black out

E127: Proton capture on ^{118}Te

13 May 2021

-  **Ulrich Popp** 10:22
The pumps of the gas target are also switched off. I write Nikos to switch them on.
-  **Jan Glorius** 10:26
At least from the ring vacuum it looks not so bad... There are some sensors out of order now. But the rest shows pretty low pressure $\leq 1\text{e-}10\text{mbar}$
Also the laser cooling experiment was running over night again. 10:27
-  **Yuri Litvinov** 13:28
Jan, you are at GSI!? Do you need any help?
-  **Jan Glorius** 13:30
Yes, i am in the lab. Cobus is around and helping me, don't worry 🍑
-  **Ragandeep** 15:10
I'm also at GSI. If you need any help help, do let me know)
-  **Laszlo Varga** 15:13
I am also available 0–24, just text me and i come on short notice 😊





14 May 2021

-  **Ulrich Popp** 21:26
We have a cooling problem in the ESR
The Cooling Station is switched off because of the blackout 21:27
It is in the ESR 21:27
cave 21:27
-  **Jan Glorius** 21:27
Target cooling?
-  **Ulrich Popp** 21:28
Pump cooling for the target
-  **Yuri Litvinov** 21:28
How serious it is? We have about a week before we need the target...
-  **Ulrich Popp** 21:30
Our problem is that during the next 2hours all pumps will be switched off
-  **Yuri Litvinov** 21:30
O–ooh
Ulrich Popp

E127: Proton capture on ^{118}Te

JG	Jan Glorius	21:31
	What can we do? Enter cave and restart cooling I guess.	
YL	Yuri Litvinov	21:31
	Can you prevent this?	
UP	Ulrich Popp	21:32
	not remote	
	Someone has to go in and to switch on the heat exchanger (Wärmetauscherstation).	21:32
JG	Jan Glorius	21:33
	Where is the switch? Directly at the new water cooling cycle?	
YL	Yuri Litvinov	21:35
	We can send somebody from the Danyal's shift!?	
UP	Ulrich Popp	21:35
	If it doesnt start you have to open it and manually switch on the fuse, maybe it is off. It looks like this: https://m.media-amazon.com/images/I/41TT-QpSUJL.jpg	
	the station is on the left side when you go in the inner area . It is connected with black isolated water pipes.	21:37
	The only device connected with this black isolated pipes there	21:38
JG	Jan Glorius	21:39
	Okay, so we need someone who does it. Open ESR and push button. Can we reach danyals people?	
UP	Ulrich Popp	21:42
	There is a button (i think black) for switch on and a red one for switch off. But if it doesnt switch on, you have to open it (big screwdriver). But you can see it behind the (plexi) glass. ;)	
YL	Yuri Litvinov	21:42
	Uli, can you call HKR and give instructions to to Danyal. He is at 2245	
UP	Ulrich Popp	21:42
	ok!!	
	danyal tries it :)	21:46
JG	Jan Glorius	21:47
	Oh ha... The guy with the two left hands 🤖	
LV	Laszlo Varga	21:48
	😊	
	Ulrich Popp	

E127: Proton capture on ^{118}Te








-  **Jan Glorius** 21:59
👍
-  **Yuri Litvinov** 21:59
With a left hand))
-  **Jan Glorius** 21:59
Thanks Ulli for keeping an eye on this 🙏
-  **Laszlo Varga** 22:14
Zsíír

16 May 2021

Diego joined group by link from Group

Jan Glorius invited Uwe Spillmann

17 May 2021

-  **Jan Glorius** 08:51
Uli, the Norhoff pump at the target makes Piep noises. Is this a Probleme?
- ESR is open now until 10 or so, tell me if I can do something 08:52
- Pierre-Michel Hillebrand joined group by link from Group
-  **Ulrich Popp** 10:12
I have to fill it when I start with Hydrogen. Tomorrow or Wednesday I have to refill it.
-  **Jan Glorius** 10:13
👍
-  **Ulrich Popp** 10:13
I dont really remember how long it works until refill, I have an alarm sending an Email.
- Maybe Somebody has to fill it during Weekend 10:13
-  **Jan Glorius** 10:15
Let's discuss in detail the next days what tasks for the target need to be covered by us.
-  **Ulrich Popp** 10:19
yes
- Thanassis Psaltis joined group by link from Group
-  **Jan Glorius** 14:29
We will have our first meeting today at 15:30 CEST. Follow the link and go to the "meeting" break-out session.

E127: Proton capture on ^{118}Te

Meeting ID: 735 877 8388

Kenncode: e127

- YL

Yuri Litvinov
Resonance measurement will take place tomorrow around noon, when the cooler is taken into operation. TCap will be needed.

17:03
- RC

Ruijiu Chen
ok
when is noon? 12:00?

17:04
17:05
- YL

Yuri Litvinov
Yes, around lunch time.

17:06
- SL

Sergey Litvinov
In reply to [this message](#)
you have to be ready from 9-00 :))

17:06
- RC


Ruijiu Chen
ok

17:06
- R


Ragandeep
👍

17:24
- SS

Shahab Sanjari


 **Sticker**
👍

18:56
- LV

Laszlo Varga


20:15
- 18 May 2021
- Chris Griffin joined group by link from Group
- Iris Dillmann joined group by link from Group
- ID


Iris Dillmann

 **Sticker**
👋

Hi folks, do we have daily meetings starting this week? Missed today since it came a bit early 😊

03:48
03:49

E127: Proton capture on ^{118}Te

- SS** **Shahab Sanjari** 11:56
we make a quick resonance measurement in about 45 min
currently @HoSnoopy is fixing the target inside ESR 11:57
- SS** **Shahab Sanjari** 13:18
@HoSnoopy what is the status?
- SS** **Shahab Sanjari** 13:44
can we come?
- UP** **Ulrich Popp** 13:45
I refilled the liq nitrogen gas trap and the ESR is already closed
- SS** **Shahab Sanjari** 13:45
ok, we start...
- YL** **Yuri Litvinov** 13:46
It will not work today(((
The time window which was available is over... now there are 13:47
stochastic people. Markus suggests tomorrow noon
- R** **Ragandeep** 13:53
:/
- SS** **Shahab Sanjari** 14:08
In reply to [this message](#)
well there was no real "time window" in that sense as stochastic cooling 14:08
experts apparently started the setup while ESR was still red, and they
still continue. So we wait...
- YL** **Yuri Litvinov** 15:05
I know, but the priority is undoubtedly to set up the present
experiment....
Guy Leckenby joined group by link from Group
- YL** **Yuri Litvinov** 21:17

- SS** **Shahab Sanjari** 21:24
👍
Jan Glorius

E127: Proton capture on ^{118}Te

the cost of a factor of 2 in duty cycle.

Sounds reasonable 🙏



Yuri Litvinov

21:29

There are still optimization options....



Jan Glorius

21:34

I guess the stochastic cooling is working, when you are already accumulating?



Sergey Litvinov

21:41

Is stochastic cooling switching off after stacking?



Yuri Litvinov

21:42

Yes, it does.

19 May 2021

Timo Dickel joined group by link from Group



Shahab Sanjari

13:34

thanks to [Сергей A.](#) and [Chen](#) and [Ragandeep](#) , we did a 20 minute measurement / recording of the resonance. 🙏🙏

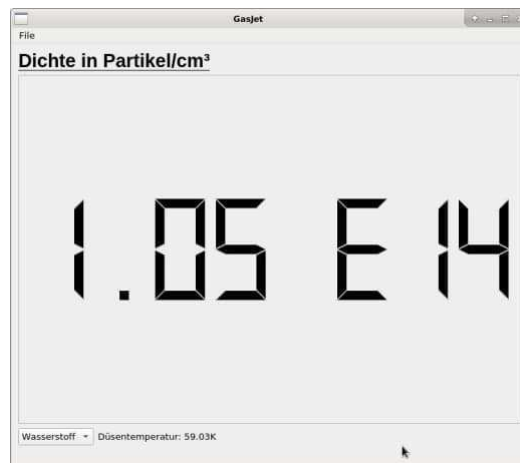
we are finished, p-gamma may continue

13:34



Ulrich Popp

14:43



Gasjet is available. :)

14:43



Yuri Litvinov

14:43

Excellent!



Laszlo Varga

14:44



Rene Reifarh

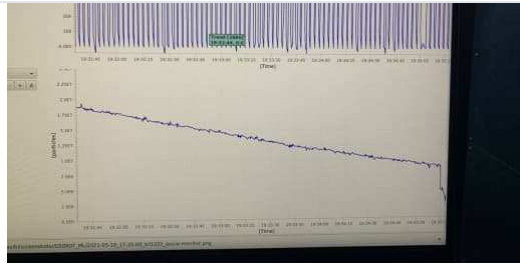
14:49

UR amazing.

Shahab Sanjari invited Nikos Petridis

Yuri Litvinov

E127: Proton capture on ^{118}Te



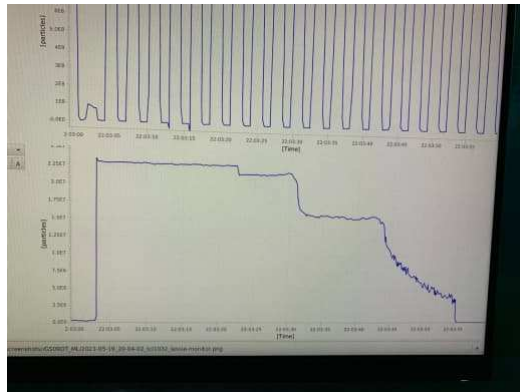
30 MeV/u half-life is a bit over 3 min

19:37

YL

Yuri Litvinov

22:06



About 10^7 at 7 AMeV, lifetime about 5 sec

22:07

JG

Jan Glorius

22:08



YL

Yuri Litvinov

22:09

These 10^7 look quite stable and not initial intensity dependent

JG

Jan Glorius

22:11

Okay, so this suggests that we are close to the charge state limit?

YL

Yuri Litvinov

22:12



20 May 2021

RR

Rene Reifarh

15:40

Hi Jan – do we have our meeting today?

LV

Laszlo Varga

15:42

Sorry we are busy with Jan now

E127: Proton capture on ^{118}Te

RR

Rene Reifarth

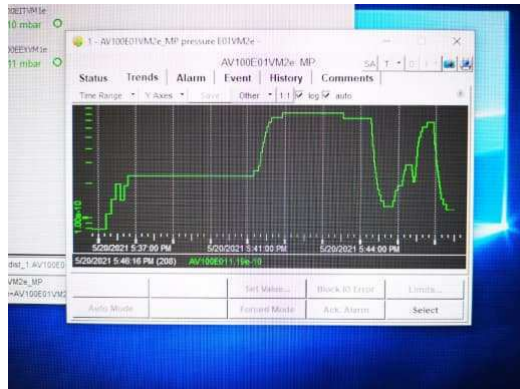
15:43

Yuri is running it

LV

Laszlo Varga

17:48



Vacuum change after detector movement

17:48

We remained in the E-10 range

17:49



17:58

Sergey approves

17:58

RR

Rene Reifarth

18:11

☺️ scary. is the H2-target already turned on?

LV

Laszlo Varga

21:21

Quick report for the shifters:

The shift for tonight (Jacobus & Michele) is canceled.

The morning shift (Sofia & Mario) can prepare for a start only from 10am. In the morning we will see if the morning shift is needed at all or not.

21 May 2021

YL

Yuri Litvinov

00:05

Is detector powered off?

LV

Laszlo Varga

00:05

I remember we left at 100V

Current ~ 0.35

00:06

E127: Proton capture on ^{118}Te

- YL

Yuri Litvinov
Excellent!

00:09
- YL

Yuri Litvinov
Short status:
The beam is decelerated to an orbit on the outside of the ESR
Detector position corresponding to killing the beam is at -80 mm,
counting from the innermost position.
This orbit cannot be used since the detector has to be placed merely 15
mm from the beam and the resultant -65 mm position disturbs the
beam during the deceleration.
Unfortunately, applying a bump at the detector position disables
electron cooling, which moves the beam onto a resonance due to its yet
incomplete ramping down.
Various attempts to modify tunes, orbits, chromaticity were not
successful: once the cooler is witted on, it destroys the beam.

Possible solutions:
1. We implemented a longer (5 s) waiting time at lowest energy to allow
the cooler power supply to ramp down. This allows for reaching a
cooled beam on the target and at the right position at the detector
(present setting).
László took the detector into operation and there some counts.
X-ray rate is about 250 Hz.
Draw back – 5 seconds waiting kills at least half of our beam.....

2. we do not switch e-cooler at all and switch the target right after
slowing down is completed.
Actually there is a 100 ms delay fixed in the software, grhhh)
X-ray rate is then 600 Hz.
But the beam is blown up very quickly.
May be it is possible to change the pattern such that we switch on the
target and a few seconds later the cooler and use the survived beam,
but this we did not test.

We can use the present setting to work on the detector but shall
discuss the overall strategy ASAP.

04:00
- RR

Rene Reifarth
To me it sounds as if solution (1) is the most reliable one. We do loose
a factor of 2, but we are in very defined situations and can probably
extrapolate to the ^{118}Te case.

06:53
- YL

Yuri Litvinov
We need to set up the detector and see the rates

09:36
- RR

Rene Reifarth
right.

09:37
- JG

Jan Glorius
I am on it

09:50

E127: Proton capture on ^{118}Te

YL

Yuri Litvinov

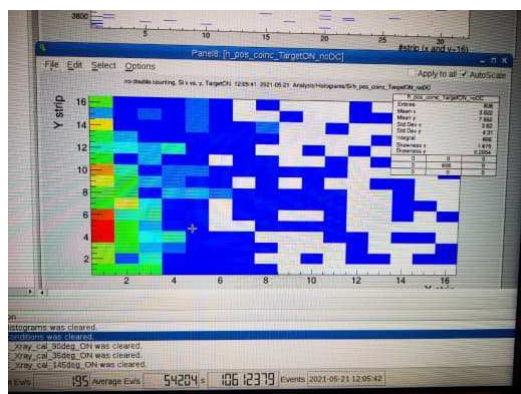
11:29

Excellent... I am in a meeting with Christoph on the run plan for Sunday

LV

Laszlo Varga

12:07



~30min test spectra

YL

Yuri Litvinov

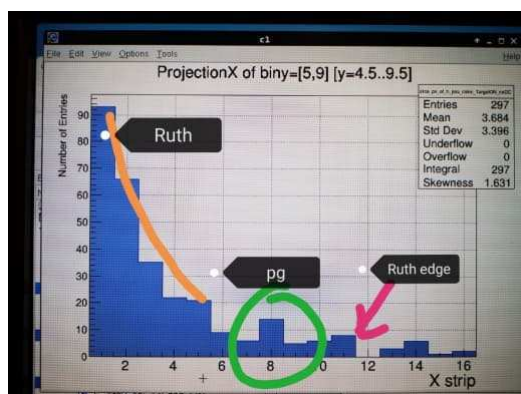
12:08

Looks not sooo bad))

LV

Laszlo Varga

12:24



Projection of the middle strips

12:24

Roughly what we expected

12:24

RR

Rene Reifarh

12:24

Cool!!

How many hours of experiment?

12:24

ah, 30min!! sorry. Very good!!!

12:25

MA

Marialuisa Aliotta

12:25

nice! 😊

LV

Laszlo Varga

12:26

In reply to [this message](#)

~1h

Bit less.maybe

12:26

RR

Rene Reifarh

12:26

so, after 1 d, we have decent statistics ... 😊

E127: Proton capture on ^{118}Te



12:29

RR

Rene Reifarh

12:29

nice to see that the Rutherford BG is rather low

LV

Laszlo Varga

12:29

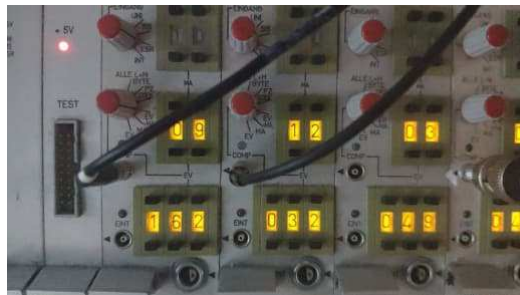
Take the spectra as a promising step

Philipp Erbacher joined group by link from Group

SL

Sergey Litvinov

17:24



suggestion to switch on the Target immediately after the deceleration

17:27

JG

Jan Glorius

17:28

Okay, why?

SL

Sergey Litvinov

17:30

to not waste time. but it is only suggestion

there is a cooling anyway

17:30

LV

Laszlo Varga

17:30

I am in the messhütte about to change

Jan?

17:30

JG

Jan Glorius

17:31

Not sure we can have evt 162 in the Messhütte... And not sure I fully understand. But let's do it now if you can. We can correct later. If needed

SL

Sergey Litvinov

17:31

don't change, you can change later. sorry for confusing

Laszlo do not change and go back :)

17:32

LV

Laszlo Varga

17:32

Ok, than i leave it like it is

JG

Jan Glorius

17:34

How many ions do we have now at start of 7 Me?

SL

Sergey Litvinov

17:37

1

E127: Proton capture on ^{118}Te

YL

Yuri Litvinov

19:39

Sergey, we forgot to put scrapers into event mode((could you help?
Also remotely. Jan is in HKR

SL

Sergey Litvinov

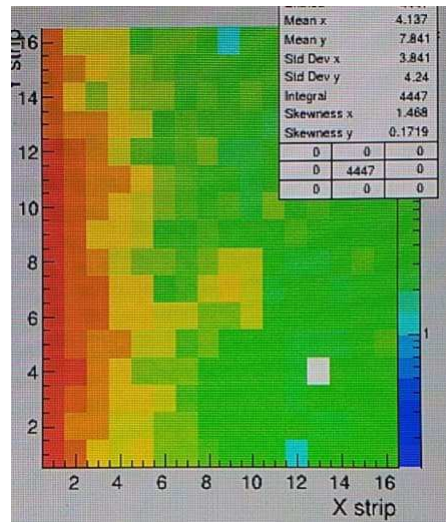
19:54

I explained, hope Jan will managed

JG

Jan Glorius

20:31



I think we are on a good track now. This is data from the last 45 minutes 👍

The ring setting is much better than before. Thanks to Sergey and Markus 🙏

YL

Yuri Litvinov

20:38

Very cute))

SL

Sergey Litvinov

20:40

In reply to [this message](#)

what is on the plot, scattering is cut?

In reply to [this message](#)

20:40

you are welcome, you know the price 🍷 :)

YL

Yuri Litvinov

20:40

Nope, the yellow square in the middle is p,g

JG

Jan Glorius

20:41

No scraper yet. We will do it later.

LV

Laszlo Varga

20:42

In reply to [this message](#)

I make you a lángos 😊



Animation

128.4 KB

20:44

Yuri Litvinov

Jan, could you please the telegram link to Thomas.

E127: Proton capture on ^{118}Te

- SS** **Shahab Sanjari** 20:57
In reply to [this message](#)
Should I add him to the group?
- Thomas Stöhlker joined group by link from Group
- TS** **Thomas Stöhlker** 21:17
Thanks👍
- ID** **Iris Dillmann** 21:54
In reply to [this message](#)
Sergey seems to be more the Blini with caviar guy... 😊 You can try to make langos with caviar but please dont buy the cheap stuff in the supermarket (Seehasenrogen)!!!!
- LV** **Laszlo Varga** 21:56
In reply to [this message](#)
About caviar lángos i have never heard before, maybe once 🤔
I suggest it with saure sahne and cheese 21:57
Like in the group picture 21:57
- ID** **Iris Dillmann** 21:59
https://www.google.com/url?q=https://masqueradedinner.com/blog/langos&sa=U&ved=2ahUKEwi2hq3ux9vwAhXOCTQIHtF3Ax8QFjAAegQICRAB&usg=AOvVaw0qYL9SreDyeyYhOsPaF_GO
- LV** **Laszlo Varga** 22:00
In reply to [this message](#)
Hmm, the receipt was made by a Hungarian lady, but for me this is too unorthodox
- SS** **Shahab Sanjari** 22:05
In reply to [this message](#)
not vegan guys, not vegan. go green 🌱
- ID** **Iris Dillmann** 22:23
[@xaratustra](#) I don't think the Pavlov dog experiment would work with vegan food 🤔🐕🐕
- JG** **Jan Glorius** 22:31
We are trying to move scrapers in ESR, but they do not move. Not by hand and not by event... Any idea? Any checkbox we might have forgotten?
We tried our RF-scraper in Egelhof position and also the "schnelle 22:32 scraper" behind cooler
- SL** **Sergey Litvinov** 22:32
can you make photo of the Ppos Tab?
- Jan Glorius**

E127: Proton capture on 118Te

SL

Sergey Litvinov

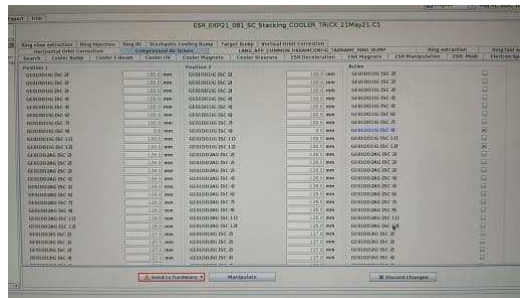
Press Luft Gerate

22:34

JG

Jan Glorius

22:34



But they should move by hand, not?

22:35

UP

Ulrich Popp

positionierbare Preßluftantriebe :)

22:36

JG

Jan Glorius

In reply to [this message](#)

22:38

Uli, is there any reason those drives are disconnected or so?

SL

Sergey Litvinov

Jan are you in HKR.

22:40

JG

Jan Glorius

Yes

22:41

UP

Ulrich Popp

try to reset them by using prophelper

22:41

SL

Sergey Litvinov

Then take the phone

22:41

JG

Jan Glorius

Have it

22:41

UP

Ulrich Popp

ah, not reset in prophelper, do init!!

22:44

SL

Sergey Litvinov

In prophelper?

22:51

JG

Jan Glorius

Operators are trying to help

22:55

SL

Sergey Litvinov

Managed?

23:16

JG

Jan Glorius

They are moving by hand now... Not yet by event

23:17

E127: Proton capture on ^{118}Te

- JG** Jan Glorius 23:38
So, i can kill the beam clearly by hand in subchain 10. But the event mode does not move this device...
- YL** Yuri Litvinov 23:39
What do operators say?
- JG** Jan Glorius 23:49
They tried but have no clue about this event stuff
- 22 May 2021
- JG** Jan Glorius 00:03
So i guess we will run without scrapers over night. And see what can be done tomorrow...
- TS** Thomas Stöhlker 00:22
Puhhh...
- CS** Cobus Swartz 05:40
-
- From the overnight data.
- YL** Yuri Litvinov 07:40
Well, I can even not move them by hand((tried 2 scrapers and none moved...
- JG** Jan Glorius 07:40
They did move yesterday
- YL** Yuri Litvinov 07:40
Uli, whom can we call from Rufbereitschaft?
- Jan, I stopped the pattern and tried 2 scrapers. No reaction(07:41
- JG** Jan Glorius 07:42
Well, we had to reset and init in prophelper yesterday. Then they moved by hand
- The operators did this at the Unilac console, because their personal logins didn't give access to the devices. 07:48
- UP** Ulrich Popp 09:51
So you need me? I am still in bavaria 😊
- (I am not everytime online while it is shown, because of my xmpp-telegram-transport-bot.) 09:53

E127: Proton capture on ^{118}Te

Software groups were called – no errors were detected; we can move drives by hand; a girl from the software group told us that the events are in the control system; but the drives do not react on the events; next suggestion is whether the cabling is correct. We would go and look, but we do not know where the control unit is located. Uli, if you can, could you please advise us what can we do.....

Ulrich Popp

11:02

If the actuators are working by hand with the control system I cannot do anything. The responsibility is at the Software group.

Only if they are not working at all I maybe can do sth

11:03

Jan Glorius

11:04

Do the signals of hand and event mode come from the same source?
Which device in ESR is this?

Yuri Litvinov

11:04

Can we check somehow that the events are coming/not coming to the unit

Ulrich Popp

11:04

afaik yes

You can check is for example by using prohelper

11:05

it

11:05

Yuri Litvinov

11:06

I am sitting in front of propeller

Device is found

11:06

What shall I look at

11:07

Ulrich Popp

11:08

which device is it?

Yuri Litvinov

11:09

E01DD1IG

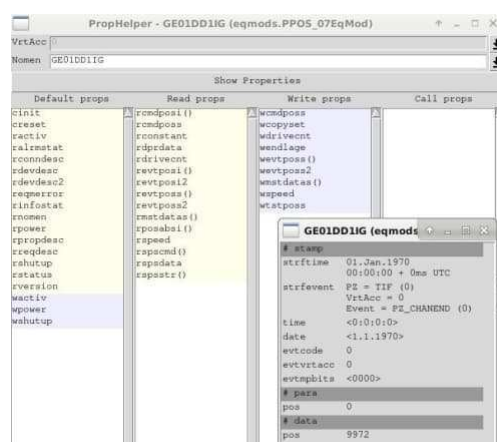
Jan Glorius

11:09

Egelhoff drive 1 GE01DD1IG

Ulrich Popp

11:10



E127: Proton capture on ^{118}Te

can I drive it?

11:11

YL

Yuri Litvinov

11:12

Sure

JG

Jan Glorius

11:13

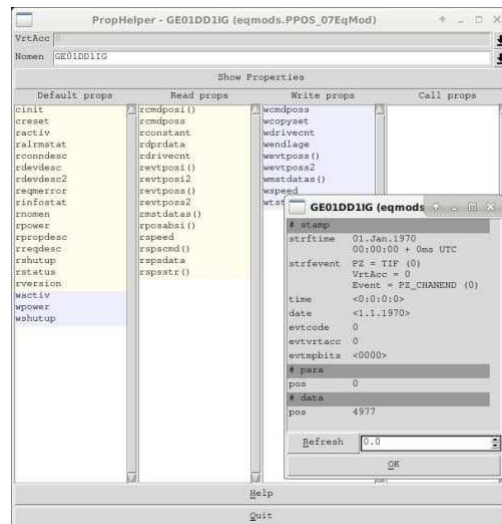
It moves

UP

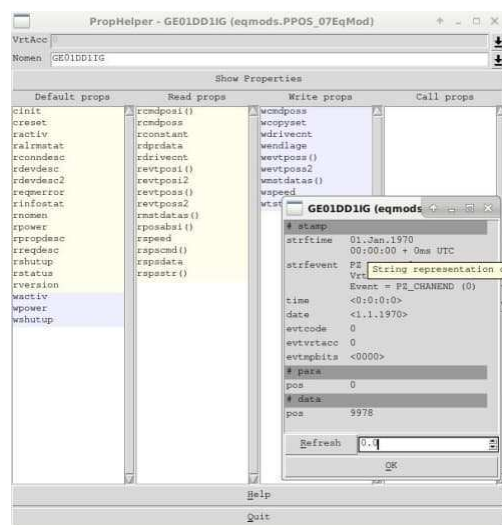
Ulrich Popp

11:14

No problem.



11:14



11:14

JG

Jan Glorius

11:15

It looks like a software/timing problem...

YL

Yuri Litvinov

11:15

Can we see that the event is not coming?

UP

Ulrich Popp

11:15

I only can say that the actuator works.

YL

Yuri Litvinov

11:15

Whom do you think we can call?

Ulrich Popp

E127: Proton capture on 118Te

JG	Jan Glorius	11:17
	We also see and can change the position in device control. So the events just don't reach the final drive controller or this one is does not accept them.	
YL	Yuri Litvinov	11:17
	Cabling? Do we have to select events somewhere locally?	
	Is there a module where the events shall be coming?	11:18
SL	Sergey Litvinov	11:18
	Events i saw yesterday in the snooptool	
	Event 162 and 163	11:18
	Detector position 1 and 2	11:19
YL	Yuri Litvinov	11:19
	In control system – yes, but do they reach the control unit?	
JG	Jan Glorius	11:20
	This also affects the "schnelle scraper" GE02DS3HG. So it seems to be a more general thing	
SL	Sergey Litvinov	11:20
	May be it is not enough time to drive detector in SC 9	
YL	Yuri Litvinov	11:20
	We drive them in 11	
JG	Jan Glorius	11:20
	We are using 10 and 11 right now	
SL	Sergey Litvinov	11:21
	Should be enough time	
YL	Yuri Litvinov	11:21
	11 has repetitions....	
	Can this be a reason? We can drive them in 4 to test	11:22
SL	Sergey Litvinov	11:23
	I know only that in the past, deactivate their event mode and sending whole context helped	
	I explained to Jan yesterday.... looks now, it does not work	11:24
YL	Yuri Litvinov	11:24
	I sent context at least 3 times today	
SL	Sergey Litvinov	11:25
	What is the maximun outer position of Egelhof can one send via device control	

E127: Proton capture on ^{118}Te

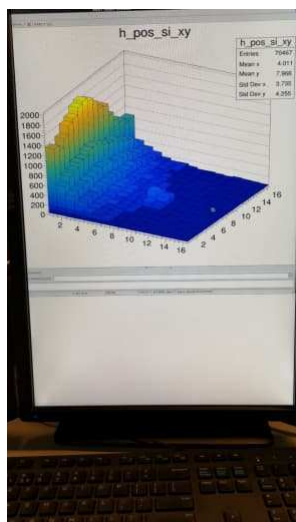
	I think	11:25
YL	Yuri Litvinov 100 mm	11:25
UP	Ulrich Popp positive, not negative 10000 means 100mm	11:25 11:25
JG	Jan Glorius I moved it from 100mm to -50mm -59mm is max	11:25 11:25
UP	Ulrich Popp -59mm ?? okay	11:26 11:26
SL	Sergey Litvinov May be in the paramodi somehow wrong dimensions, which however i checked before and it was fine	11:26
JG	Jan Glorius No, it can move beyond beam axis	11:26
UP	Ulrich Popp ah, right, yes, It can move about 150mm at all, a special configuration, but it is not so good for the bello	11:26
JG	Jan Glorius We won't need this much movement	11:27
UP	Ulrich Popp normally they only can move 125mm at all	11:27
YL	Yuri Litvinov I tried other values, +50 mm, did not help We try another scraper Did not move((11:27 11:29 11:30
UP	Ulrich Popp which one?	11:31
SL	Sergey Litvinov Can Egelhof detector be always in?	11:31
JG	Jan Glorius In reply to this message This one In reply to this message	11:31 11:31

E127: Proton capture on ^{118}Te

	GE02DS3HG also works. ~0 – -12500 (negative direction)	11:33
JG	Jan Glorius Did you just move it?	11:33
UP	Ulrich Popp yes	11:33
JG	Jan Glorius Ok...	11:33
UP	Ulrich Popp with prophelper	11:33
JG	Jan Glorius To -100mm?	11:34
UP	Ulrich Popp now it is completely outside I can move it to 100mm	11:34 11:34
JG	Jan Glorius Yes, we are trying to move by event now and where slightly confused by your movement	11:35
UP	Ulrich Popp ah okay so I better log out :)	11:35
JG	Jan Glorius Did you move again? It's back to -100	11:35
UP	Ulrich Popp yes I moved it to .100 -100 but now I am logges out	11:35 11:36 11:36 11:36
JG	Jan Glorius 👍	11:36
YL	Yuri Litvinov Jan, we can continue	13:47
JG	Jan Glorius You can close	13:48

E127: Proton capture on ^{118}Te

- JG** Jan Glorius 15:31
Anyone in for the meeting 🤖
- E** Enis 15:32
I am 🤖
- JG** Jan Glorius 17:29
So we are on track again and just started the measurement with the scraper in position now. I will clear the online spectra now.
Now you should see a much clearer peak appearing. 17:31
- RR** Rene Reifarh 17:32
Congratulations!
Any news from FRS? 17:32
Starting tomorrow, right? 17:32
- JG** Jan Glorius 17:33
For the night shift (Benny & Philipp) the plan is to stay with this setting all the time. Enis & Pierre-Michel will give you the shift instructions. Call me in case of DAQ or detector problems.
- TS** Thomas Stöhlker 17:33
AAv3
- PE** Philipp Erbacher 17:35
In reply to [this message](#)
Alright 👍👍 let's hope that we don't need to wake you up :-)
- JG** Jan Glorius 17:36
In reply to [this message](#)
They were progressing, last i heard. We will see the vacuum tomorrow. The plan is still to give the beam to them at 8am.
This is also the reason why we skip the early shift tomorrow (17:37
[Diego](#) & [@dr_orf](#)). No need for you to come in. Beatriz et al. Will cover the 1 hour left.
- LV** Laszlo Varga 17:38



E127: Proton capture on ^{118}Te

👍😊 nice to see that this is meanwhile a well-established standard.
Despite the fact that no one else can do it. 🙄

JG

Jan Glorius

17:54

In reply to [this message](#)

That's true, but it is really time to change the reaction now.
 $^{124}\text{Xe}(p,g)$ is starting to make me feel bored a bit 😊

TS

Thomas Stöhlker

17:54



ID

Iris Dillmann

18:19

😊 Looking forward to see the pioneering "heaviest radioactive beam direct proton capture reaction" measured so far... 🙄 The previous "record" was 39K measured by DRAGON 🦖. Thanassis was a co-author, right?

TP

Thanassis Psaltis

19:19

Nope, that experiment was the year before I started grad school 🙄

YL

Yuri Litvinov

20:13

Do you have a picture with „scraper“. There should be quite some counts by now?

Jan, did you set the second scraper?

20:13

JG

Jan Glorius

20:16

No, i think we would need the comparison between one and two scraper measurements to draw a conclusion. But the time is too short to get this until tomorrow 8.

YL

Yuri Litvinov

20:16

In reply to [this message](#)

Indeed, Rene, last time we were excited to see it, and now it is „nothing special“

In reply to [this message](#)

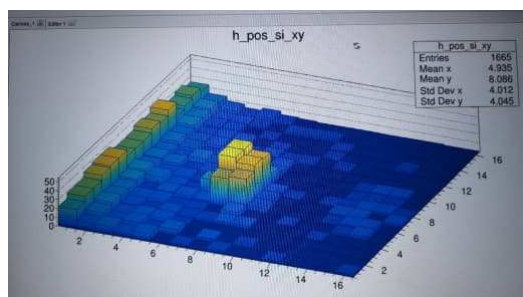
20:17

You are Right! Let see, maybe we can do this with Te.

LV

Laszlo Varga

20:19



Last ~2.5h combined

20:20

JG

Jan Glorius

20:20

You can directly compare the cross sections of (p,g) and (p,n) here.
Wow

E127: Proton capture on ^{118}Te

Wunderbar!



- | | | |
|----|---|-------|
| YL | Yuri Litvinov | 20:21 |
| | Looks very good! | |
| LV | Laszlo Varga | 20:22 |
| | There is a bit of decreasing crap on strip $x = 2-6$ which i dont get super much right now | |
| | Might be only backscattered Rutherford, but this needs more ananalysis | 20:22 |
| JG | Jan Glorius | 20:24 |
| | Looks like fading-out of the forward scattering to me. Maybe the scraper effected is a bit smoother/uncleaner than we expected. | |
| LV | Laszlo Varga | 20:25 |
| | In reply to this message | |
| | Yes, i have this feeling also | |
| | Well, we can scrape more even | 20:25 |
| JG | Jan Glorius | 20:27 |
| | Maybe it is really worth to try putting the scraper a bit closer? | |
| LV | Laszlo Varga | 20:28 |
| | Yes, this is what i meant | |
| | 5mm more should still be fine i think | 20:28 |
| | So like 25mm away from the beam instead of.30mm | 20:28 |
| YL | Yuri Litvinov | 20:29 |
| | You can safely drive it to 2.5, that is 20 mm from the beam | |
| JG | Jan Glorius | 20:30 |
| | Yes, i guess the risk is very low, even for 20mm. | |
| | Laszlo, do you feel confident to do this? | |
| | With my guidance on the phone? | |
| LV | Laszlo Varga | 20:30 |
| | I am in the office right now | |
| | But give me like a 10min and i am ready | 20:31 |

E127: Proton capture on ^{118}Te

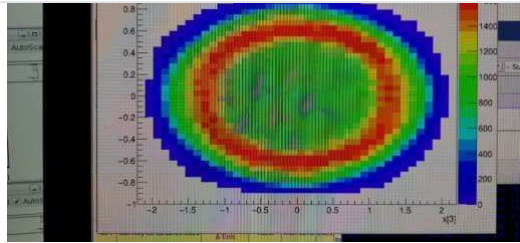
E	Enis	20:32
	We just stopped a run. Shall we wait until you adjusted the scrapers? Or shall we start a new one?	
YL	Yuri Litvinov	20:32
	Pierre-Michel is there	
JG	Jan Glorius	20:32
	Ah, yes	
	Can someone pic up the phone at the ESR panels in 2 minutes?	20:33
PH	Pierre-Michel Hillebrand	20:34
	yes	
JG	Jan Glorius	20:50
	Scraper is set to 20mm distance 👍 Online server spectra are cleared	
LV	Laszlo Varga	21:09
	I just quickly checked my simulations and the pg at the scraper position should reach around from 1cm to -1cm. So we are safe in this regard	
UP	Ulrich Popp	21:38
	What happend with the gastarget? It actually has $\sim 4 \cdot 10^{14}$ Particles/cm ² ?	
TS	Thomas Stöhlker	21:38
	???	
UP	Ulrich Popp	21:39
	the whole day. Was it planned? ;)	
JG	Jan Glorius	21:39
	We did nothing...	
UP	Ulrich Popp	21:39
	OK	
	aah! haha my fault	21:40
TS	Thomas Stöhlker	21:40
	was it really $4 \cdot 10^{14}$?	
UP	Ulrich Popp	21:40
	wrong gas was switched. All correct, $1 \cdot 10^{14}$.	
LV	Laszlo Varga	21:41
	We didnt see change in the online monitor	
	Remained $1 \cdot 10^{14}$	21:41

E127: Proton capture on ^{118}Te

- TS** **Thomas Stöhlker** 21:42
ahhh 😊
- UP** **Ulrich Popp** 21:42
yes. 1×10^4 . All correct.
- TS** **Thomas Stöhlker** 21:46
this is really remarkable. Such high density and such a stable operation. Really great!
- LV** **Laszlo Varga** 21:57
In reply to [this message](#)
A quick question to the pn. Since it is visible in our spectrum already, should not we aim for the measurement of it as well at 7MeV? For this maybe we should move the detector like 2 strips (0.6cm) away from the beam to completely catch all pn events
- JG** **Jan Glorius** 21:58
What does the simulation say, how big is the cone theoretically?
- LV** **Laszlo Varga** 21:59
This i have to simulate right now. About 7mev pn i didnt dream before
But judging from the histogram i would say two.more strips 22:00
To be safe 22:00
- JG** **Jan Glorius** 22:03
Well, i guess, you can move it if really want. However, one cannot trust the shape visible at this statistics...

Personally, i think we can extract the (p,n) cross section in the current position.
- LV** **Laszlo Varga** 22:08
So
I quickly made a simulation. It says that 1 more strip movement would be maybe enough to.cover completely 22:10
But now we are much sensitive range with the simulation also. 22:10
Just above the pn threshold
So the uncertainty is hard to tell 22:11
Even with the current position we should be pretty much good 22:11
- JG** **Jan Glorius** 22:13
Yes, and we can simply add all runs with this Detector position for analysis. Even when the scraper was moved.
- LV** **Laszlo Varga** 22:13
Hmm
I just checked the pn at the scraping position and it is exctly 2cm 22:14
away from the axis

E127: Proton capture on ^{118}Te



For the g.s.

22:16

JG

Jan Glorius

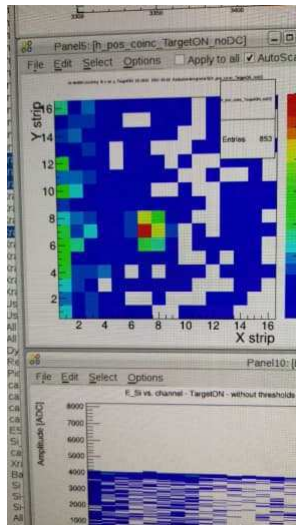
22:17

Mh, shall we go to 25mm scraper position? Now or never.

LV

Laszlo Varga

22:18



The background now of course improved for the pg, it seems

22:18

I would move to 25mm with the scraper

22:19

JG

Jan Glorius

22:20

Then do it. Pierre-Michel should know what to do.

LV

Laszlo Varga

22:20

Yes

JG

Jan Glorius

22:24

It should be 7.5 in absolute position then, right?

LV

Laszlo Varga

22:25

Yes

We just did

22:26

And started a new run

22:26

Cleared the online [si.map](#)

22:26

JG

Jan Glorius

22:26



RR

Rene Reifarh

23:18

You think, the small area to the right of (p,g) is (p,n) ? The area is so constrained because we are close to threshold, hence almost no recoil?

E127: Proton capture on ^{118}Te

LV

Laszlo Varga

23:20

In reply to [this message](#)

Yes, it should be the pn since the center of the pg and the pn distributions were typically 2cm away from each other

Which is the case seemingly for what we see

23:20

RR

Rene Reifarh

23:21



LV

Laszlo Varga

23:21

Regarding the size of the pn as you said, we are closer to threshold hence smaller cone

23 May 2021

B

Beatriz

08:09

We have given the beam to the FRS.

JG

Jan Glorius

08:09

👍 nothing to report from the night?

PE

Philipp Erbacher

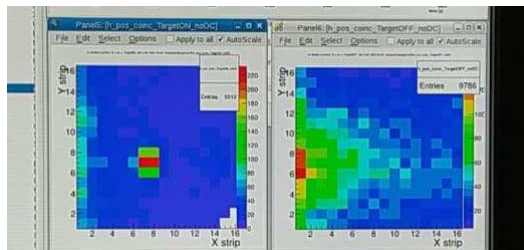
08:11

Some of the magnets shut off during the shift change at about 23:00 .
Worked again after a reset :-> the rest of the night was rather uneventful

MS

Michele Sguazzin

08:11



JG

Jan Glorius

08:12



B

Beatriz

08:12

Our 1h shift went very smoothly!

RR

Rene Reifarh

09:09

In reply to [this message](#)

(p,g) is crystal clear. Not sure, if we can trust the (p,n) yet. Very nice!

TS

Thomas Stöhlker

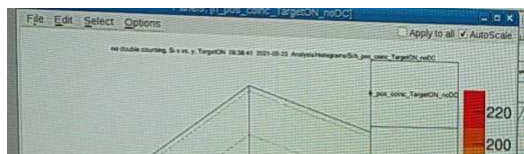
09:10

wow, looks really very nice!

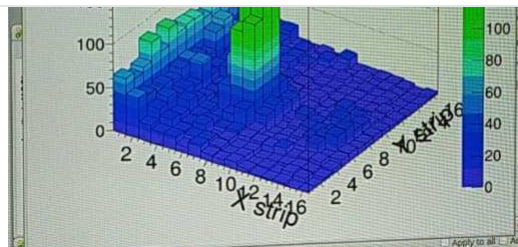
MS

Michele Sguazzin

09:44



E127: Proton capture on ^{118}Te



To better see the (p,n)

B

Beatriz

09:51

The Ge are being filled automatically now. Should we write or look at something? I think we should write the weight right?

TS

Thomas Stöhlker

09:52

usually one should stop the acq since filling may produce a lot of noise

B

Beatriz

09:53

Yes we stopped the DAQ at 8:00 already.

JG

Jan Glorius

09:53

I did filling remotely 1 hour ago.
Don't worry, all is done

TS

Thomas Stöhlker

09:54



B

Beatriz

09:54

Ok!

RC

Ruijiu Chen

14:58

I am on duty today. I am sorry i will be 20 min late.

LV

Laszlo Varga

14:59

Arent your shift cancelled?

RC

Ruijiu Chen

15:00

I don't know. I did not receive any emails about this.

JG

Jan Glorius

15:13

I am sorry, i didn't communicate today.

All shifts until Monday night are cancelled for now.

15:13

Sorry again, Ruijiu & Alex.

15:14

E

Enis

15:16

In reply to [this message](#)

Sorry just to be clear, the shifts continue from Monday 23:00 onwards?

JG


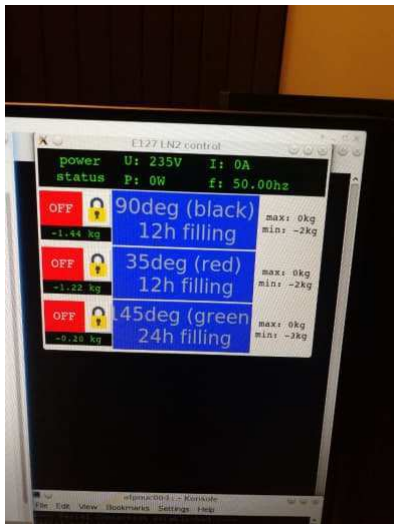
Jan Glorius

15:21

Yes, exactly. Sorry for being not clear.

Sergey Litvinov

E127: Proton capture on ^{118}Te

- JG** Jan Glorius 15:23
I also won't be able to join the meeting today. Maybe someone could report on FRS status?
- SL** Sergey Litvinov 15:23
Can one send the link for the meeting?
- JG** Jan Glorius 15:25
In reply to [this message](#)
This one
- RC** Ruijiu Chen 15:28
there is no beam and nobody in HKR. what is wrong with experiment?
- CS** Cobus Swartz 15:33
In reply to [this message](#)
We're having the zoom meeting now.
- RC** Ruijiu Chen 15:33
Alex and i got it. No problem. we are going to leave. Do we have meeting today? If there is a meetin, could you please send me the link?
- CS** Cobus Swartz 15:34
In reply to [this message](#)
The link is in Jan's last message.
- RC** Ruijiu Chen 15:35
 Sticker
- RC** Ruijiu Chen 16:00
This is the status of N2 cooling sysyem. One of the detectot is going to minimum.
-  16:00
- should we fill the Ge detector or target? 16:01
- Thomas Stöhlker

E127: Proton capture on ^{118}Te

JG	Jan Glorius No need to fill! I did this morning, Laszlo will do this evening The weight is not very well calibrated. -0.8kg is full for the 90 degree detector	16:06 16:07
TS	Thomas Stöhlker but the controls should work	16:07
RC	Ruijiu Chen what about the LN for target?	16:08
JG	Jan Glorius Don't worry, we have things under control. Target was filled late yesterday, Laszlo will fill it later.	16:09
HW	Helmut Weick Hi Yuri, Are you on Zoom of E127?	16:10
YL	Yuri Litvinov Was a few min ago I'll be at GSI in 15 min	16:11 16:11
RC	Ruijiu Chen ok. We got it. We are going to leave HKR. Thanks.	16:14
JG	Jan Glorius 👍 thanks Ruijiu	16:15
RC	Ruijiu Chen You are welcome.	16:23
JG	Jan Glorius In reply to this message Just to clarify, we cancel the shifts because the FRS is being tuned for us. This was the original plan and is actually a good sign.	16:57
YL	Yuri Litvinov Yeap, but I would like to ask the morning and afternoon shifts of tomorrow to be ready to come in case we are faster tonight. We will cancel/confirm in the night... The beam at the FRS is well advanced Surely, to get it to the ESR will take some time	16:59 16:59 17:00
JG	Jan Glorius I have to apologize, there was a misunderstanding between Yuri and me. For now we cancel the shifts until tomorrow 7:00am. The shifts tomorrow morning and afterwards might be needed in an optimistic forecast.	18:32

E127: Proton capture on ^{118}Te

YL	@Jan, could you please check whether ^{120}I is a serious contaminant for us.	
YL	Yuri Litvinov We have ^{118}Te at 7 AMeV! There will be the morning shift!	04:44 04:44
SL	Sergey Litvinov Jan should come immediately 😊	04:45
YL	Yuri Litvinov About 2×10^5 particles per shot stored.	04:46
YL	Yuri Litvinov The beam at DSSSD is at -25 mm (absolute). This is very much inside. The question is whether we shall remove the bump and move it to -40 mm as before? We leave now! What is left is to decide on bumps, set up the target overlap, and run... In case there are complications with setting the bumps, please call me...	05:12 05:21 05:22
JG	Jan Glorius How do I set the bumps, which devices to use?	05:26
YL	Yuri Litvinov When can you come? I can wait still a bit	05:29 05:29
JG	Jan Glorius In reply to this message Which charge state? $52+$?	05:29
YL	Yuri Litvinov $52+$ Please forget this – we have a clean beam HF picks up very selectively only our line May be, we shall make a short TCAP run to have an overall picture Ruijiu and Ragandeep, could you record a few cycles. This will make many nice figures	05:30 05:30 05:30 05:31 05:32
JG	Jan Glorius Okay, i am at GSI in about 35 minutes.	05:32
YL	Yuri Litvinov Excellent!	05:33
	Ragandeep	

E127: Proton capture on ^{118}Te

RC

Ruijiu Chen

07:51

sorry. I just see the message.

RR

Rene Reifarh

08:13

In reply to [this message](#)

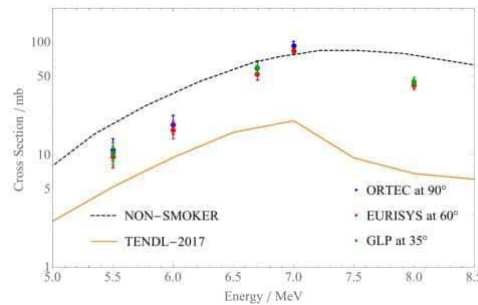
Congrats!! This is the first true FAIR (Phase-0) experiment in our (p,g) campaign. Dreaming of it since 2007 ... 😊

RR

Rene Reifarh

08:50

If I'm not mistaken, we should see around 0.2 cts / s for a cross section of 10 mb. ~5000 cts /shift @ 10 mb



08:55

Here is what we saw with Xe back in '16:

JG

Jan Glorius

09:18

Now, we are sharing beam with HTD. This seems to have some influence, beam is barely visible on the schottky at 7mev and the stacking steps are also not very clear to see on the Trafo anymore.

We still struggle to make a target overlap...

09:18

JG

Jan Glorius

11:18

We are in production with ^{118}Te now. However the conditions are not perfectly optimized. Target overlap is there, since we see xray peaks emerging. but the rate per second is negligible and we cannot optimize the overlap.

The parallel beam to HTD costs us at least half of the intensity... 11:19
But this was expected i guess.

RR

Rene Reifarh

11:21

"parasitic" mode ... nomen est omen.



11:21

JG

Jan Glorius

11:22

I have hope that tomorrow we will get another optimizing look by our ESR guys and for stoc. Cooling. Then let's see 🤞

UP

Ulrich Popp

11:23

Is it too difficult to adjust the beamline in the target section?

RC

Ruijiu Chen

11:24

Maybe the emittance of secondary beam is much larger than the primary beam.

Jan Glorius

E127: Proton capture on ^{118}Te

This is similar to last year...

- UP** **Ulrich Popp** 11:32
ah okay
- YL** **Yuri Litvinov** 11:39
Jan, how much do we get per spill?
- PH** **Pierre-Michel Hillebrand** 11:39
would it help to change the time binning of your rate histograms?
- YL** **Yuri Litvinov** 11:39
You can do e.g. 20 stacks ...
- JG** **Jan Glorius** 11:40
In reply to [this message](#)
We start at $8e5$ and have $1.1e6$ after 5 stacks.
- LV** **Laszlo Varga** 11:42
In reply to [this message](#)
If we can trust in lassie. We are at the sensitivity limit
- YL** **Yuri Litvinov** 11:42
This would mean $6e4$ per stack, which is a factor >3 as without the HTD
- JG** **Jan Glorius** 11:43
In reply to [this message](#)
Yes, but we always have 2 HTD spills in-between our injections and have to wait a bit. This makes stacking a bit less efficient.
- YL** **Yuri Litvinov** 11:45
When did they start? Before I left, we had reasonable conditions, right?
- JG** **Jan Glorius** 11:45
They started at 8 am or so.
- The difference is obvious, they switched off Shortly and the good condition was back 11:46
- In reply to [this message](#) 11:46
Daniel said he would be available for the noon meeting today.
- YL** **Yuri Litvinov** 11:47
Ok
- In reply to [this message](#) 11:47
Green
- Grrrh 11:48

E127: Proton capture on ^{118}Te

Right. the CBM is the parasite hurting/killing the host (us)

TS

Thomas Stöhlker

12:01

Is there a noon meeting today?

JG

Jan Glorius

12:03

In reply to [this message](#)

A non-official one I think. But yes

YL

Yuri Litvinov

12:09

I sent an email to Daniel and Christian.... let see what can be done.

Last year, CBM was running parallel to 205Tl experiment and we had to switch them off during accumulation phase. This was fine since afterwards we measured for several hours, but now(((

YL

Yuri Litvinov

12:29

One full day today and another one on Saturday or so...

CBM has presently 8 seconds extraction time. If they increase to 10 seconds, do you think our request gets in?

JG

Jan Glorius

12:34

In reply to [this message](#)

I do not understand this issue too well i have to say... We need to compare their extraction time to our time between the injections?

YL

Yuri Litvinov

12:34

CBM will change now to 10 seconds. Please have a look whether they still get 2 spills in between our stacks.

JG

Jan Glorius

12:35

Will do

With 20 stacks we reached 1.65×10^6

YL

Yuri Litvinov

12:37

So 6×10^5 in 15 stacks, not much.... (I compare to the number you wrote above)

TS

Thomas Stöhlker

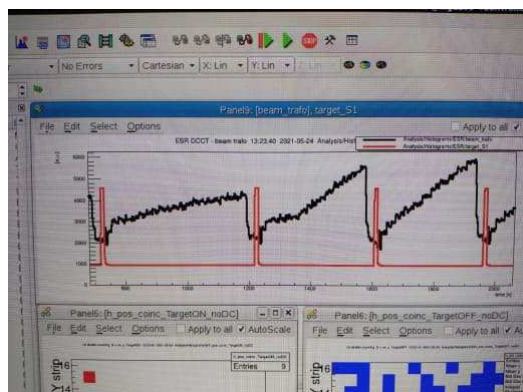
12:39

Puhhh, sounds like CRYRING

JG

Jan Glorius

13:24



E127: Proton capture on ^{118}Te

in the middle they switched off

RR **Rene Reifarh** 13:46
That is a very clear plot. Thanks Jan.

JG **Jan Glorius** 13:48
Props go to Mario, i just made the foto. 📷

RR **Rene Reifarh** 13:48
Dream team. 😊👍

TS **Thomas Stöhlker** 13:57
Looks really great👍

YL **Yuri Litvinov** 14:06
Jan, you should first decide on the position of dass

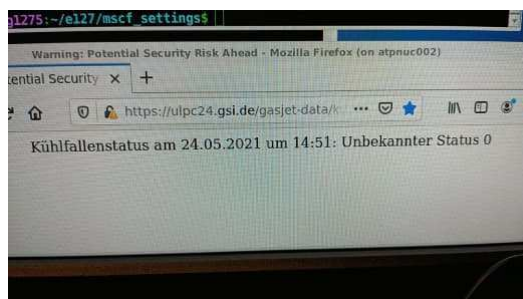
Dsssd 14:06

Without bump, the overall storage was better, with the bump we were entering into a resonance 14:07

The bump was very close to 1:1, that is 1 mm bump corresponding to 1 mm beam shift 14:08

JG **Jan Glorius** 14:09
Okay, we will try reducing the bump from -20mm to -10mm and see

JG **Jan Glorius** 14:53
@HoSnoopy we have a new status of the trap in ESR

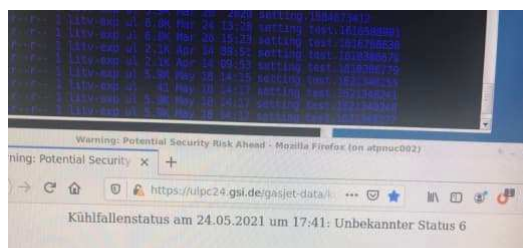


Shall we go in and check? 14:53

UP **Ulrich Popp** 17:45
"Kühlfallenstatus am 24.05.2021 um 17:43: Alles ok, Pumpe ist im Standby"

I just came home :) 17:46

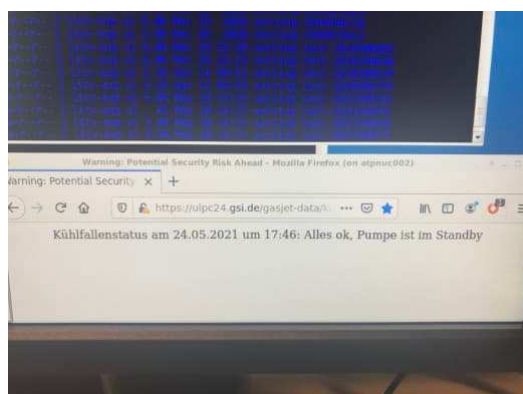
PH **Pierre-Michel Hillebrand** 17:46
Should we do something ??



E127: Proton capture on ^{118}Te

UP **Ulrich Popp** 17:46
maybe it is empty, but not yet critical? ;-]

PH **Pierre-Michel Hillebrand** 17:47
Better now!



17:47

UP **Ulrich Popp** 17:47
The problem is that norhof never gave us an "API" for its pump, so we had to look by try and error ...

tomorrow I have to refill it 17:47

maybe somebody earlier 17:48

PH **Pierre-Michel Hillebrand** 17:48
how do we know?

UP **Ulrich Popp** 17:48
if it is peeping inside you have to refill it ;)

normally it should be monitored 17:49

JG **Jan Glorius** 18:43
this is the big dewar which fills a smaller one for the trap, right?

We have a similar dewar outside ESR, which is full and could be quickly exchanged. 18:44

PH **Pierre-Michel Hillebrand** 18:50
I hear a peep every 30 s from outside ESR, is it that?

JG **Jan Glorius** 18:51
Yes, that's it...

I guess we need to exchange it. 18:51

LV **Laszlo Varga** 18:52
Should i go as well , Pierre-Michael?

JG **Jan Glorius** 18:55
It's not complicated.

1. Have ESR opened in TSG, with the big gate
2. Take the big dewar outside the lab to inside.(The one with the

E127: Proton capture on ^{118}Te

1. Make sure there is no ice on the new dewar's flange (use heater if needed)

5. Slowly lower the pump into the new dewar and seal it.

@ulli: any reset needed?

YL	Yuri Litvinov	18:55
	Please talk to the operators on how it is the best to do TSG	
	We need Strahlenschutz Rufbereitschaft	18:56
JG	Jan Glorius	18:56
	Mh, yes...	
UP	Ulrich Popp	19:03
	maybe switch off and on (green button)	
JG	Jan Glorius	19:13
	Is this going to be okay, are you guys handling this?	
	In case of Problems i can come in, But only around/after 21:00	
UP	Ulrich Popp	21:05
	"Kühlfallenstatus am 24.05.2021 um 20:49: Pumpe pumpt gerade"	
	"Kühlfallenstatus am 24.05.2021 um 21:04: Alles ok, Pumpe ist im Standby"	21:06
	Sounds good :)	21:06
LV	Laszlo Varga	21:06
	20:21 Alles ok, pumpe ist im Standby	
	Density is again e14	21:06
	In reply to this message	21:07
	Sorry i meant 21:06	
UP	Ulrich Popp	21:08
	The hydrogen goes all the time through the nozzle, there is always a jet, but it is interrupted by a small sheet of metal	
JG	Jan Glorius	21:09
	In reply to this message	
	Nice job Pierre-Michel & Laszlo 👍	
	Thank you very much and sorry for the dewar confusion, my fault 🙇	
SL	Sergey Litvinov	21:24
	What about data? Do you see pgamma?	
LV	Laszlo Varga	21:24
	In reply to this message	
	I remember like 7counts	
	Already enough for a phd	21:25
	Enis	

E127: Proton capture on ^{118}Te

SL

Sergey Litvinov

Thanks, and scattering is cut?

21:26

LV

Laszlo Varga

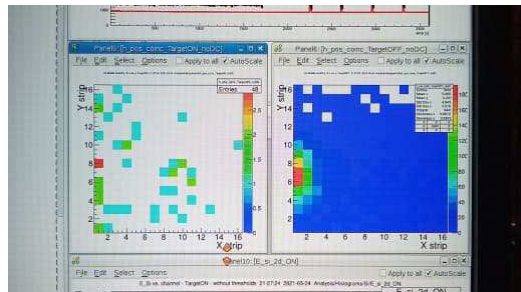
Yes, looked fine. Enis, maybe make a picture?

21:27

E

Enis

21:27



SL

Sergey Litvinov

In reply to [this message](#)

Yes, that's nice.

21:28

25 May 2021

LV

Laszlo Varga

00:40

I just quickly analysed what is the optimal setting regarding the number of stacking (and measurement time). To do so i looked at the number of counts in the KREC peak measured with the 90deg HPGe. I couldnt exclude all effects, but it seems that the 10 and 20 stacking with 11 sec targetON phase are rpuhly the same. However, the 30stacks + 3x5.5sec targetON phase is convincingly better, roughly like 1.5times more counts than in the previous two.cases. not sure though is this the effect of somehing else.

In conclusion, i would.keep measuring with the current settings, 00:41 so 30stack, 3x5.5sec targetON

RR

Rene Reifarh

00:42

Thanks for the swift analysis! 😊

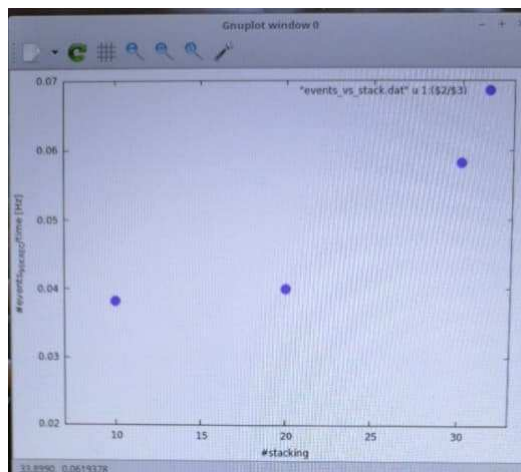
Ho many counts did you see?

00:43

LV

Laszlo Varga

00:43



E127: Proton capture on ^{118}Te

RR

ah, here it comes. 😊 thanks.

LV

Laszlo Varga

00:44

Y-axis KREC counts at 90deg /measurement time

Roughly

00:44

I didnt look precisely when was beam and when not

00:44

CS

Cobus Swartz

00:47

Okay. I guess then we'll stick to the same settings.

LV

Laszlo Varga

00:47

Yes, please continue like this

At least i dont see reason to change anything else

00:48

RR

Rene Reifarh

00:48

Yes. 😊

CS

Cobus Swartz

00:52

Noted. We now see 11 counts in the p,gamma region.

LV

Laszlo Varga

00:53

👍 keep collecting 😊

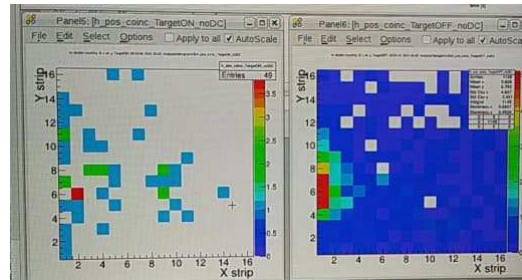
Can u make a picture?

00:53

MS

Michele Sguazzin

00:54



LV

Laszlo Varga

00:55

In reply to [this message](#)

Ah, the histos were cleaned for the 30stack settings, right.

?

00:55

CS

Cobus Swartz

00:55

I believe so. We weren't here at the time though.

LV

Laszlo Varga

00:56

Anyhow, we have the data 😊

E

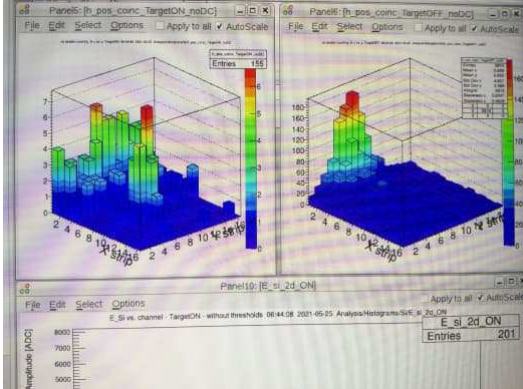
Enis

00:56

In reply to [this message](#)

Yes they were

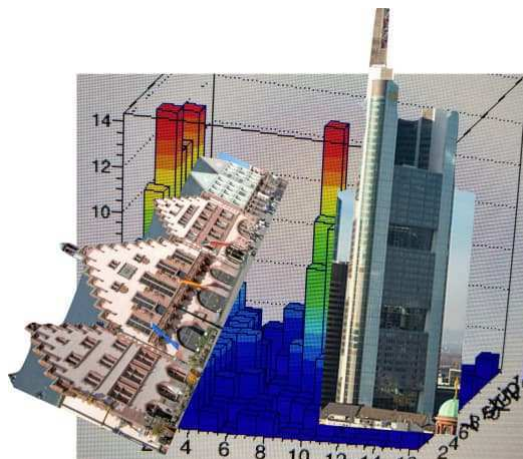
E127: Proton capture on ^{118}Te

- CS** **Cobus Swartz** 00:57
I agree. We'll post another picture in the morning.
- LV** **Laszlo Varga** 00:57
👍
- RR** **Rene Reifarh** 00:58
only, if you see (p,g) !!! 😊
- CS** **Cobus Swartz** 06:44

Good morning! ☀️
- D** **Diego** 06:58
Hi all. I just arrived at GSI for the shift, but I probably got lost. Which is the right building? First at time at GSI...
- OF** **Oliver Forstner** 07:07
Where are you now?
- MS** **Michele Squazzin** 07:08
Hi Diego, if you need we can meet at the welcome office
- D** **Diego** 07:08
At the registration
Yes please 😊
Thank you!
- OF** **Oliver Forstner** 07:18
In reply to [this message](#)
Hi Diego,
Did you manage or still lost?
- RR** **Rene Reifarh** 08:24
In reply to [this message](#)
Amazing – it is so clean, one can basically count by hand. ~25 cts / 6 hours ... duty-cycle strikes back ...
- YL** **Yuri Litvinov** 13:17
Do we need to bring anything into the ESR? It can be open for 1 hour.

E127: Proton capture on ^{118}Te

Robert Grisenti joined group by link from Group

- RG** **Robert Grisenti** 18:15
Some more patience... still optimizing
- RG** **Robert Grisenti** 18:43
All quadrupols have failed right now!
The on-call service has to come 18:45
- RR** **Rene Reifarh** 18:48
🤖
- SS** **Shahab Sanjari** 18:48
can take up to 30 min
Юрий A. says, not up to, but at least 18:49
Robert is wondering.... 18:51
- SL** **Sergey Litvinov** 18:53
who is in hkr now?
- SS** **Shahab Sanjari** 18:53
mr bombastik
- SL** **Sergey Litvinov** 18:54
what kind of error&
? 18:54
- SS** **Shahab Sanjari** 18:54
The electrical current which is needed to supply the magnets is cut
- SL** **Sergey Litvinov** 18:59
thanks
- SS** **Shahab Sanjari** 19:33



We discovered,.... Frankfurt!

Tino Morgenroth joined group by link from Group

E127: Proton capture on ^{118}Te

You have to improve your photoshop skills 😊. But indeed

SS

Shahab Sanjari

19:37

sometimes you gotta be quick with results....

the magnet guy just arrived.

19:42

he is taking a look at ESR magnets

19:42

19:44



TS

Thomas Stöhlker

19:46

I like this image of Frankfurt 😊. Looks great 🍷

RG

Robert Grisenti

20:28

Quadrupoles are on again... 😊

LV

Laszlo Varga

20:29

Please dont start to measure yet, xrays are getting filled with LN2.
Needs 3mins roughly

RG

Robert Grisenti

20:30

OK

Let me know when you are ready

20:30

They have to optimize anyway....

20:31

LV

Laszlo Varga

20:42

Xrays are filled, if possible, start the measurement. Sorry for the pause.
I come to HKR

SS

Shahab Sanjari

20:43

markus still working

markus is finished

20:44

we would now start the LMD file

20:44

LV

Laszlo Varga

20:44

Ok

SS

Shahab Sanjari

20:45

after that I do lifetime measurements

E127: Proton capture on ^{118}Te

we are getting new counts now 20:51

this shot was not so strong, markus still looking at the cooler voltage 20:51

YL

Yuri Litvinov

21:33

How does it look now? Do we have higher rates?

JG

Jan Glorius

21:34

Slightly higher than before, but only 20 instead of 30 stacks

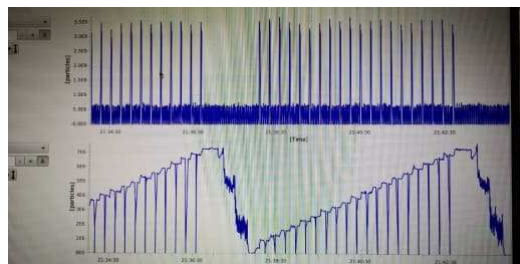


21:34

LV

Laszlo Varga

21:44



YL

Yuri Litvinov

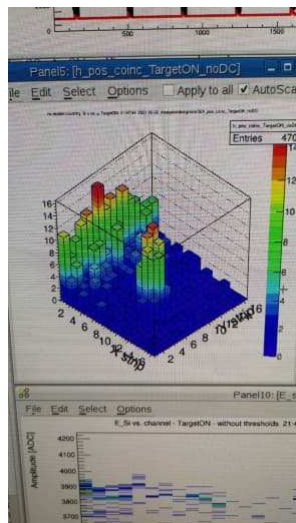
21:45

Skyscraper grows?

LV

Laszlo Varga

21:47



Slowly, but monoton

But in general we have indeed higher rates 21:48

RR

Rene Reifarh

21:49

We can probably go to a lower energy tomorrow, right?

YL

Yuri Litvinov

21:49

Shall decide in the afternoon

RR

Rene Reifarh

21:49

Sounds good.

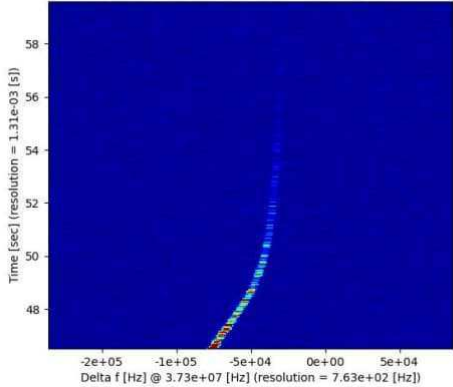
Yuri Litvinov

E127: Proton capture on ^{118}Te

- JG** Jan Glorius 21:50
👍
- RR** Rene Reifarh 21:50
😊
- YL** Yuri Litvinov 21:52
Having several stacks improves the stability of the SIS intensity... we are very stable at $3e9$. Talked to operators, there is not much they can do to improve further
- RR** Rene Reifarh 21:55
It's amazing. How long did it take to get the plot above?
- JG** Jan Glorius 21:57
I think about 20 hours, maybe less.
- LV** Laszlo Varga 21:58
We have now scrapers everywhere. Rutherford scraper and skyscraper
😄
- YL** Yuri Litvinov 22:02
Today we lost nearly the entire day due to a planned 30 min intervention to SIS....
- TS** Thomas Stöhlker 22:03
😞
- SS** Shahab Sanjari 22:03
I will stop gas target for the next 2 cycles for lifetime measurements
each cycle is about 6 minutes 22:03
elog is update 22:04
- JG** Jan Glorius 22:06
Very good. Thanks
- YL** Yuri Litvinov 22:09
Please record also a few 410 MHz, full cycle, beautiful pictures... May be you can post the one you made a photo of))
- SS** Shahab Sanjari 22:10



E127: Proton capture on ^{118}Te

- YL Yuri Litvinov 22:10
:-)
- TS Thomas Stöhlker 22:10
cool!
- YL Yuri Litvinov 22:11
One shall sell it to a discovery channel))
- TS Thomas Stöhlker 22:12
This reminds about the ESR comets. Robert & Nikos you still remember 😊
- RG Robert Grisenti 22:17
Sticker 😊
- SS Shahab Sanjari 22:30

- UP Ulrich Popp 22:37
Thomas AFAIK the comets only appeared with the perforated sheet nozzle, not with the actual laval ("trumpet") nozzle.
- SL Sergey Litvinov 22:37
In reply to [this message](#)
[Laszlo](#) is this with 2 scrapers?
- 26 May 2021
- TS Thomas Stöhlker 00:51
Uli, sure but it was only a reminder 😊
- LV Laszlo Varga 06:02
In reply to [this message](#)
No, only one
- SL Sergey Litvinov 08:23
when do you want to change to 6 MeV/u

E127: Proton capture on ^{118}Te

Status: 1 h break, source filament needs to be changed.

08:32

JG

Jan Glorius

09:17

@HoSnoopy do you take care of the target filling tasks until Friday?

UP

Ulrich Popp

09:45

ah not today!

tomorrow and friday

09:45

LV

Laszlo Varga

09:45

Ok

UP

Ulrich Popp

09:46

My daughter is ill and I have to take care of her

JG

Jan Glorius

09:48

No problem, take care of your family!

UP

Ulrich Popp

09:50

Target is running very good and the actuators afaik also 😊.

maybe I have to change the hydrogen bottle on friday. That maybe means less density for about 10minutes. But maybe it is enough inside. This I'll see tomorrow.

09:51

RR

Rene Reifarth

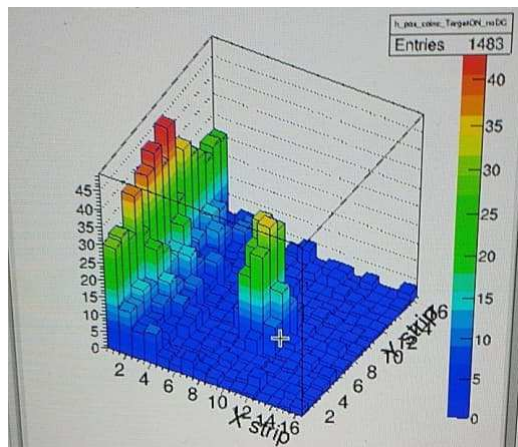
09:55

As if you were here and taking care. 👍

JG

Jan Glorius

10:15



250 – 300 counts

10:16

SL

Sergey Litvinov

10:16

When do we go to 6 MeV

MA

Marialuisa Aliotta

11:22

In reply to [this message](#)

this is fantastic! congrats! 😊

JG

Jan Glorius

11:35

We have a problem with the ESR cycle. There is a huge loss after

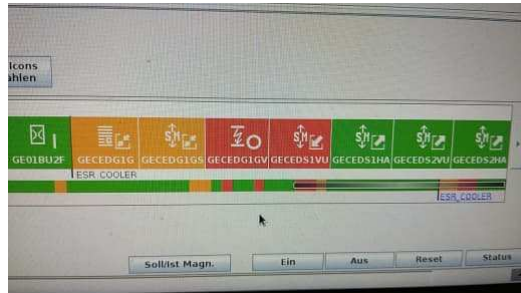
E127: Proton capture on 118Te

NO, it's the e-cooler

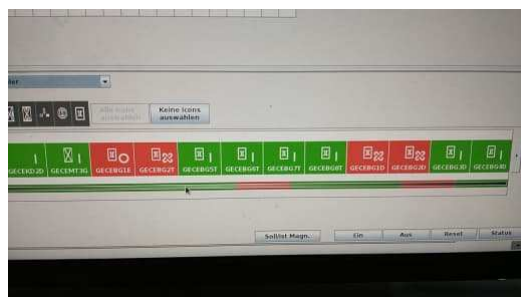
11:37



11:38



11:39



11:40

I think we should switch them back on?
ECENG1E...

The problem seems to be solved. Let's see

11:48

YL

Yuri Litvinov

12:09

I wrote a note on how to switch it on. On a A4 page next to consoles

SL

Sergey Litvinov

12:10

stop the pattern, is important

Before you start any reset

12:10

JG

Jan Glorius

12:11

We are running again.

Thanks to yuris note 🙏

YL

Yuri Litvinov

12:11

I can come only in 20 min

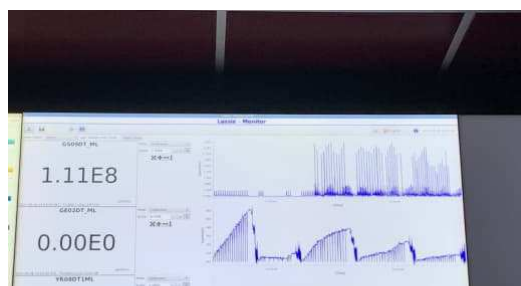
Excellent!!!

12:11

YL

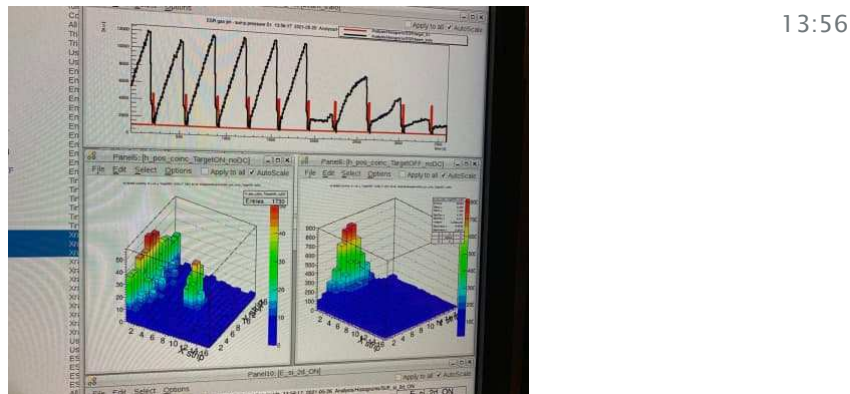
Yuri Litvinov

13:54



E127: Proton capture on ^{118}Te

The parallel operation with cave-C is not optimal... we adjusted the timing, but the intensity is now much lower than before... 13:55



TP

Thanassis Psaltis

14:31

Hallo! Could someone come pick me up from the front office?

LV

Laszlo Varga

18:33

We started to measure at 6 MeV

Lets collect some statistics to see if our settings are fine

18:33

JG

Jan Glorius

18:34



SL

Sergey Litvinov

19:08

cooler is down

R

Ragandeep

19:26

Data taking started again!

JG

Jan Glorius

20:31

Filling is ongoing

YL

Yuri Litvinov

20:32

Do we have a spectrum already?

JG

Jan Glorius

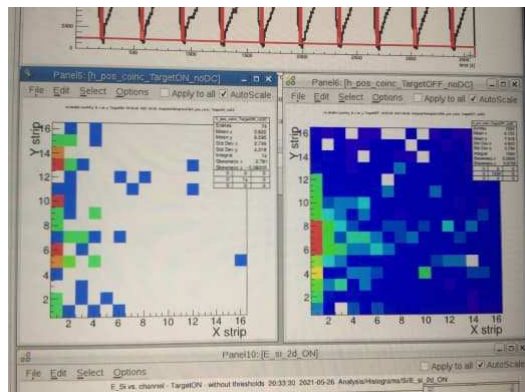
20:33

Probably a bit early...

R

Ragandeep

20:33



E127: Proton capture on ^{118}Te

YL

Hmmm

Let us wait.. at least it looks plausible that the setting is reasonable

20:35

JG

Jan Glorius

Filling is done. Please restart the data taking.

20:41

R

Ragandeep

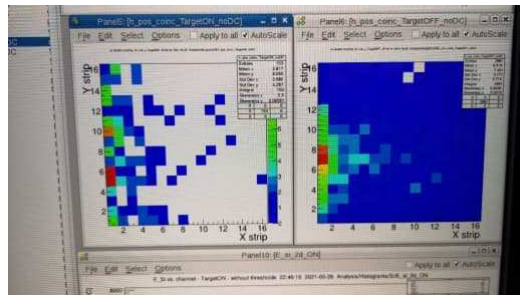
Ok

20:42

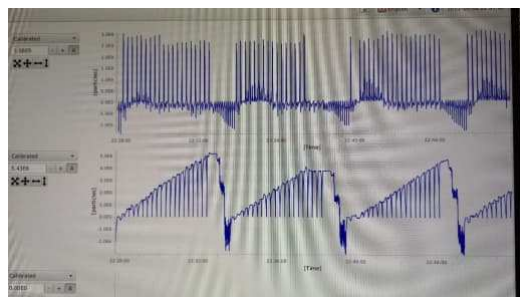
LV

Laszlo Varga

22:47



4–4.5h data, still hard to see anything. but our intensities are very low at esr



22:47

In reply to [this message](#)

22:48

Hard to say even

YL

Yuri Litvinov

Let us run over night and see in the morning.

22:50

RR

Rene Reifarh



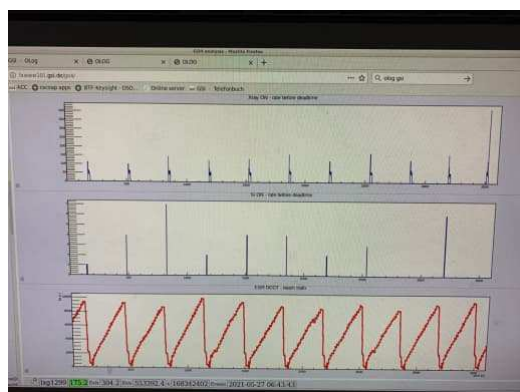
22:50

27 May 2021

YL

Yuri Litvinov

06:43



E127: Proton capture on ^{118}Te

I will move the target bump a bit 06:45

JG

Jan Glorius

06:46

Yes, it's worth a try. But I thought You did yesterday

YL

Yuri Litvinov

06:46

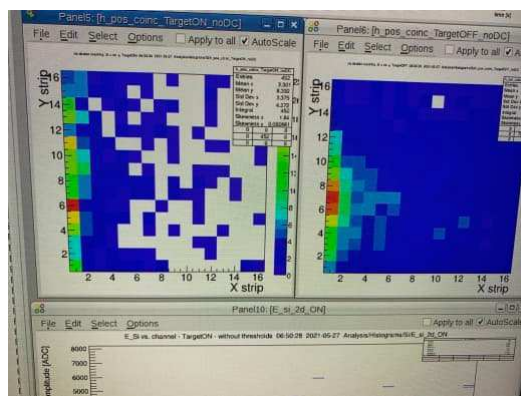
Yes, we did

Our diagnostics was the x-ray rate

06:47

Overall it is not yet consistent cause We have counts in the first dsssd strip 06:48

What should that then be? Backwards scattering? From what? It is tough to say whether our "target on" and "target off" pictures are qualitatively different 06:50



06:50

JG

Jan Glorius

06:56

Yes, this is hard now. But I guess we can only try to confirm settings and wait.

I think we have target overlap but cross section and luminosity don't allow 10h success 06:58

RR

Rene Reifarh

07:01

Do we see Te-x-rays during target-on?

YL

Yuri Litvinov

07:01

This Jan can check...

I do re-check the overlap and let it run further

07:02

JG

Jan Glorius

07:04

In reply to [this message](#)

We get a spectrum with the expected lines, yes.

RR

Rene Reifarh

07:05

Well... Then there must be overlap, right?

Do we know the position on the beam at the DSSD? Could that be different? 07:06

YL

Yuri Litvinov

07:07

Yes, it may well be. We thought to fine tune according to the p,g peak on the dssd))

E127: Proton capture on ^{118}Te

- JG** I don't believe that the position has changed much. The Si map spectrum shows
That Rutherford backscatter is on a comparable level than pg 07:08
- YL** **Yuri Litvinov** 07:09
There is always Merfi around, and it might well be that we just need higher statistics
I will do two more steps and if no visible improvements, will let it 07:10 run with set parameters
- RR** **Rene Reifarh** 07:11
Mmh. Can we compare the Te x-ray rate (cts per hour or so) with the situation at 7 AMeV?
- YL** **Yuri Litvinov** 07:12
We have a much lower intensity at 6 AMeV, we lose too much at the second ramp
- RR** **Rene Reifarh** 07:13
Ah. I see.
- JG** **Jan Glorius** 07:13
In reply to [this message](#)
We shall do a direct comparison... I will report as soon as I have values
- RR** **Rene Reifarh** 07:13
Then this is the main problem?!
Very good. Thanks Jan! This seems to be the only way to draw 07:14 solid conclusions.
- YL** **Yuri Litvinov** 08:23
We restarted the data taking
The overlap with the target was indeed not optimal 08:23
By shifting the beam from -11.5 to -12.8 mm, we gained a factor 08:24 of three rate on the DSSSD
May be 2.5 not 3 08:24
We adjusted the scraper 08:24
Looking at x-ray rate (quite tough to judge) and put it from +1 to 08:25 +2
For setting the detector position we have no good diagnostics 08:26
- RR** **Rene Reifarh** 08:27
1 mm change in beam position should not clear the (p,g) entirely. So maybe it was indeed mostly the (missing) statistics

E127: Proton capture on ^{118}Te

relaxed somewhat is the edge of the Rutherford

Next goal is to run and see in a few hours 08:30

RR

Rene Reifarh

08:30

back to "staring at the screen" again ... :D

YL

Yuri Litvinov

08:31

We clear the plot in the online "starring screen" and restart to starring

RR

Rene Reifarh

08:33



YL

Yuri Litvinov

08:52

We lose the beam after about 4 seconds at 6 AMeV. Probably also a kind of resonance that we fought at 7.

JG

Jan Glorius

08:52

Mh...

YL

Yuri Litvinov

08:52

Also, the x-ray rate is nearly independent from the number of stacks

RR

Rene Reifarh

08:53

In reply to [this message](#)

Even without H2-target on?

YL

Yuri Litvinov

08:53

We used 7 during optimization and 20 did not increase the intensity

In reply to [this message](#)

08:53

Yes

With the "resonance" at 6 AMeV I cannot do much. May be Sergey can help to modify tunes a little.

08:55

I suggest to go faster cycles for the time being until the slowing down is improved (if possible Surrey)

08:56

RR

Rene Reifarh

08:56

would 5.5 AMeV be better then? (sorry for the stupid question, don't understand this amazing machine all too well)

YL

Yuri Litvinov

08:56

Could well be, but could also be worse

RR

Rene Reifarh

08:57

just thought ... since we were running ^{124}Xe at 5.5 AMeV ...

YL

Yuri Litvinov

08:57

New control system – new reality

E127: Proton capture on ^{118}Te

- SL** **Sergey Litvinov** 08:58
In reply to [this message](#)
I cannot come today, i go to the hospital
- YL** **Yuri Litvinov** 08:58
Oki doki
- SL** **Sergey Litvinov** 08:58
It is hard to do something with a fragment beam, unfortunately
- RR** **Rene Reifarh** 08:59
Take care Sergey ... There's life beyond physics.
- SL** **Sergey Litvinov** 08:59
We already discussed it with Markus, that we did not optimise the deceleration to 6 MeV but only at 7
- YL** **Yuri Litvinov** 08:59
Alvarez is down((grrrh
- SL** **Sergey Litvinov** 09:00
With fragment beam, one can see only on the Schottky line whether it is more intense or not
- YL** **Yuri Litvinov** 09:00
It is understandable, Cepёжа
- SL** **Sergey Litvinov** 09:01
Just for you information))
- YL** **Yuri Litvinov** 09:02
We can switch to primary beam....
- RR** **Rene Reifarh** 09:07
that might be a good idea ... ^{124}Xe @ 6 MeV, optimize and than go back to ^{118}Te ... is it feasible in terms of human-power?
- YL** **Yuri Litvinov** 09:08
I do not know
- FRS is rather simple, but ESR is difficult 09:09
- RR** **Rene Reifarh** 09:09
yeah – that was my main concern ...
- well then maybe: faster cycles now and we discuss with Sergey & Markus as soon as they have time for a meeting? 09:12
- HW** **Helmut Weick** 09:29
do you need help for FRS?
- Yuri Litvinov**

E127: Proton capture on ^{118}Te

tell me when you want changes on FRS, good excuse to skip another meeting.



Just refilled LN2 on the ESR-roof, tomorrow a bottle change für H2 is necessary

Error at FRS!!! Somebody removed the degrader 30min ago. I will move it back in.

Oh... Can we get a more precise time for this removal?

Helmut, please add a note into logbook

It was already removed yesterday says the log file, whole night with other beam.

13:14

yes, yesterday 12:30 the degrader was removed. Now stacking gets more beam accumulated.

13.21











actually at 13:44.

Helmut, shall we check the degrader effect with another thickness?

we can it, it is fast, but it was tested carefully with primary beam.

14:06

E127: Proton capture on ^{118}Te

-  In reply to [this message](#)
Yes, but it seems not to work as expected.
In reply to [this message](#) 14:06
Not really
-  [Helmut Weick](#) 14:09
we can test, just say when.
-  [Jan Glorius](#) 14:10
I stopped the DAQ, let's test
Are you moving degraders? 14:16
Otherwise I would restart data taking 14:17
-  [Helmut Weick](#) 14:21
no, only in direct contact, not by telegram.
-  [Shahab Sanjari](#) 15:08
In reply to [this message](#)
How is this possible?
Last year during the E121, 10 hours measurement someone also moved something in FRS we lost vacuum quality drastically 15:09
-  [Helmut Weick](#) 15:09
Maybe it was in an log file is wrong, because the controller crate was set to manual mode.
-  [Shahab Sanjari](#) 15:10
Grrrr
We have to find a way to prevent such mistakes 15:10
-  [Jan Glorius](#) 15:12
We don't get beam injected in ESR anymore. SIS shots are however still good at $2.6\text{e}9$
Can someone check FRS devices please 15:13
-  15:16
Is this an important magnet in ESR?
-  [Sergey Litvinov](#) 15:24
GEIT magnets are electron spectrometer. They should be off
but the GE0MU1 is a dipole 15:25
which should be always on 15:25

E127: Proton capture on ^{118}Te

if it is red, then important magnets are off 15:28

JG Jan Glorius 15:31
Okay, thanks. I think we are back in operation.

HW Helmut Weick 15:32
ok, FRS seems fine.

YL Yuri Litvinov 15:35
Jan, what about 15:30 meeting?

JG Jan Glorius 15:51
Sorry, we were busy at ESR panel...

ID Iris Dillmann 15:52
I think we just left the meeting. Assumed you were busy. Hope you have better news and data tomorrow 😊

UP Ulrich Popp 17:01
I just had to change the gas bottle (hydrogen). After I had to adjust the inlet pressure. I think it is okay now. I have to go for a meeting with a needle (vaccination :))

JG Jan Glorius 17:43
Cobus, Michele, is there a bigger problem? No beam for 30min...

CS Cobus Swartz 17:46
Yes, since 17:10 it's been off at the UNILAC.

JG Jan Glorius 17:46
Okay, so the operators are working on it, very good. Thanks

CS Cobus Swartz 17:47
Just got it back.

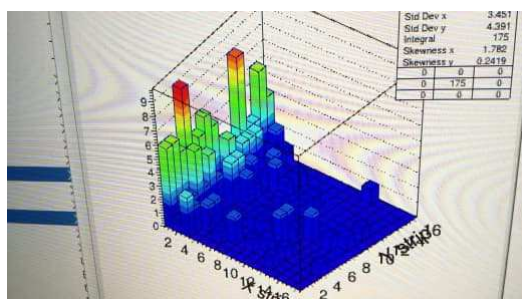
We have resumed data taking. 17:49

JG Jan Glorius 17:50
👍

RR Rene Reifarh 18:27
Do you see something in the center area of the DSSD? (p,g)

A few counts... Maybe? 18:27

CS Cobus Swartz 18:29



E127: Proton capture on ^{118}Te

KK

Aha! Very good!

Thanks!

18:29

(yesterday there was just nothing at all. Very suspicious.)

18:30

YL

Yuri Litvinov

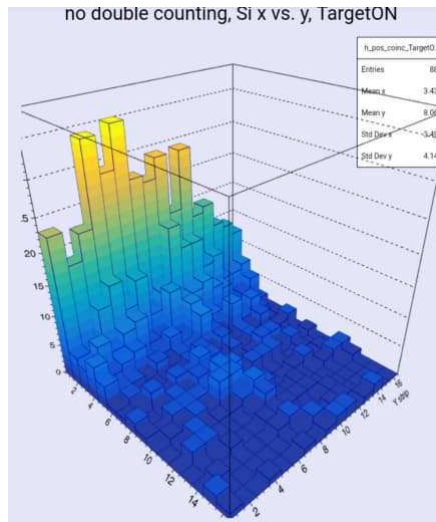
18:32

Hard work of the morning shift!

JG

Jan Glorius

18:33



YL

Yuri Litvinov

18:33

Please keep an eye that the ESR on the scheme above the console is blue and not red!!

JG

Jan Glorius

18:33

In the online go4 we have all counts for 6 MeV in the spectrum.

Slowly it starts looking as expected

18:33

CS

Cobus Swartz

18:35

EST picture on top monitor was red a moment ago.

It's blue again now after the operator switched on Ge01KP02 to 09, and 20 to 22.

18:36

YL

Yuri Litvinov

18:36

Excellent! Kp03 must stay off!

CS

Cobus Swartz

18:38

Noted. In the meantime we lost the beam in the SIS.

Beam is back.

18:49

E127: Proton capture on ^{118}Te

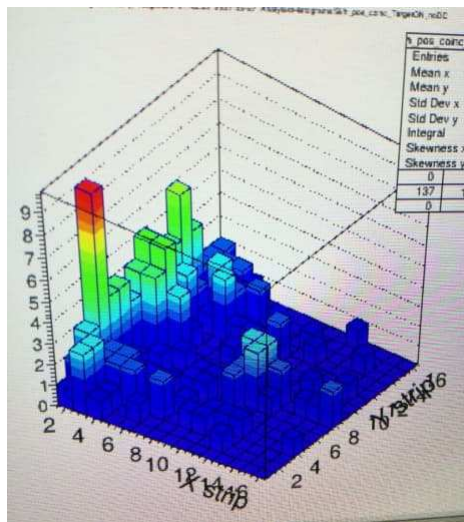


Fyi

CS

Cobus Swartz

21:43



(p,g) appears quite clearly now.

TS

Thomas Stöhlker

21:45

Wow, indeed something is growing 🍌

YL

Yuri Litvinov

21:45

Looks indeed promising)) if so, then the detector is closer to the beam than in 7 AMeV setting....

LV

Laszlo Varga

21:48

In reply to [this message](#)

By looking at the picture seems like 2mm closer

YL

Yuri Litvinov

21:49

But I would not move it now. Let us take as much statistics as possible.

LV

Laszlo Varga

21:49

In reply to [this message](#)

Yes, exactly

TS

Thomas Stöhlker

21:49

Golden rule: never put a solid state detector as close as 0 mm to the beam. I once did but I will not tell you about the result 😞

YL

Yuri Litvinov

21:50

Please keep an eye on the blue ESR Pictogram above the ESR console. If turned red, please inform the operators













CS

Cobus Swartz

21:54

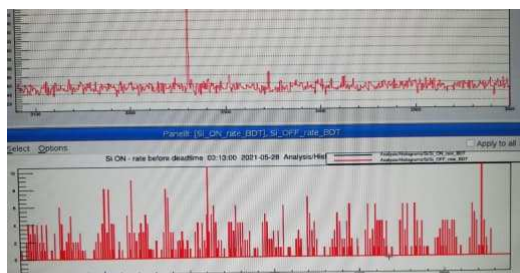
We are. It's still blue for now.

E127: Proton capture on ^{118}Te

	At least the stacking looks awful	21:55
	Cobus Swartz We know. They are looking at it.	21:56 21:56
	Jan Glorius Ah, much better 🤞	21:59
	Cobus Swartz Yes, it looks much healthier now.	22:02
28 May 2021		
	Sergey Litvinov KP 17–20 are off	00:11
	Mario Weigand Operators try to solve it	00:11
	Yuri Litvinov Restart the scu and send afterwards the whole context	00:12
	Sergey Litvinov does not help	00:12
	Yuri Litvinov If several are off, then the control unit hangs These get off pretty often	00:13 00:14
	Mario Weigand We have the impression since ESR is back online we don't see any p,g events anymore. But we don't see the problem... Anyone there?	03:00
	Laszlo Varga I am awake 😊 Well isn't the rate like less than few counts/hour? However, where you can judge more, I think, is the xray spectra If the krec peak grows at the right place	03:01 03:02 03:02 03:03
	Mario Weigand We didn't see one count on the Si in one hour if I'm not mistaken	03:03
	Laszlo Varga It means we have correct beam + target In reply to this message Hmm, are the histograms rolling?	03:03 03:03
	Mario Weigand	

E127: Proton capture on ^{118}Te

LV	Laszlo Varga	03:04
	And neizher the xray peaks are growing?	
MW	Mario Weigand	03:04
	Now beam is gone. .	
LV	Laszlo Varga	03:05
	Than alert the operators	
	*then	03:05
MW	Mario Weigand	03:05
	They are already on it	
LV	Laszlo Varga	03:05
	👍	
	Hmm, few counts you should see anyhow on the Si spectra	03:06
	Ypu didnt see only for the target on spectra jn the last hour?	03:06
	Or also nothing for.the target off?	03:06
MW	Mario Weigand	03:08
	Not sure about that one, but nothing on Target on	
LV	Laszlo Varga	03:09
	Do.we have good target density?	
MW	Mario Weigand	03:09
	Yes	
LV	Laszlo Varga	03:10
	Also on the lassie you see the esr cycle?	
	I mean in the last hour	03:10
MW	Mario Weigand	03:11
	Yes	
LV	Laszlo Varga	03:11
	Than in principle we should be fine... hmm	
	Make maybe a picture of the si on/off histos	03:12
	And the 90deg krec peak	03:12
	And look at it in a half an hour again	03:12
MW	Mario Weigand	03:13



E127: Proton capture on ^{118}Te

LV

Laszlo Varga

03:15

In reply to [this message](#)

Hmm, it is hard to see in this. zoom the histo on the x axis maybe from 3300–3600

So last 5 min

03:15

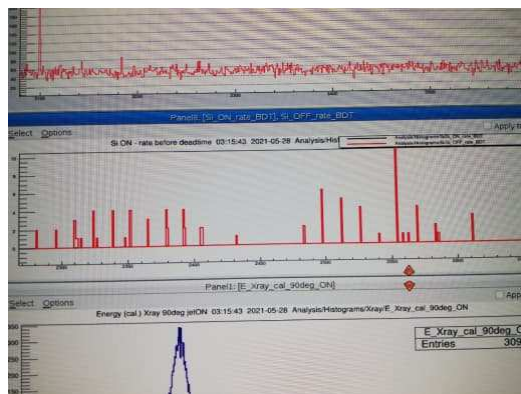
Or if there was no beam now, then maybe a bit more

03:15

MW

Mario Weigand

03:16



No Si on events

03:16

LV

Laszlo Varga

03:16

Hmm

esr cycle is running?

03:17

The pattern, and on the lassie you see it accordingly?

03:18

MW

Mario Weigand

03:19

We saw it while we had still beam

LV

Laszlo Varga

03:19

Hmm

Well

03:19

If we have target and beam as well then i am out of ideas

03:20

Beam intensities were roughly fine?

03:20

If have beam again, can you make a picture of the lassie monitor?

03:21

MW

Mario Weigand

03:21

Ok

LV

Laszlo Varga

03:27

Be sure that go4 is not frozen or something

Maybe try to check the rate monitor

03:27

Monitor when we have back the beam

03:27

In the target on phase the xray_bdt should show some numbers in the range of 110

03:28

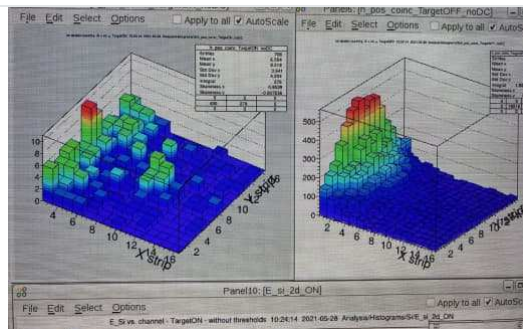
At least in the first second

03:28

E127: Proton capture on ^{118}Te

MW	No 😞	
LV	Laszlo Varga	03:37
	Yeah, i see iz on the online go4	
	The xray rates in the target on phase were like 60, which is at the background level... super strange	03:39
	Like half an hour ago	03:39
MW	Mario Weigand	03:41
	Yes it was higher before the esr failure	
	Just getting beam back	03:41
LV	Laszlo Varga	03:42
	Lets see	
MW	Mario Weigand	03:44
	Now we had a target on event	
	Looks better now for some reason	03:44
LV	Laszlo Varga	03:45
	Xray rates is like 90	
	What i see at least	03:45
	We had 2 counts on the Si as well	03:45
MW	Mario Weigand	03:45
	Yes	
LV	Laszlo Varga	03:45
	Maybe not pg but counts 🤔	
	So	03:47
	110xray-bdtON	03:47
	Looks promising	03:47
MW	Mario Weigand	03:47
	👍	
LV	Laszlo Varga	03:48
	Acompanied with 4 counts on the Si	
	So, hopefully the problem solved itself 😊	03:49
	Yeah, the new shoot looks good as well	03:50
MW	Mario Weigand	03:51
	I dont understand why, but apparantly it solved itself 😊	
YL	Yuri Litvinov	10:23
	Could you please post the current 3D plots	

E127: Proton capture on ^{118}Te



RR

Rene Reifarh

10:24

No beam right now. Had interruptions ...

YL

Yuri Litvinov

10:24

ESR blue?

RR

Rene Reifarh

10:25

Alvarez...

YL

Yuri Litvinov

10:25

((

RR

Rene Reifarh

10:53

Longer break expected. Problem not yet located, hence no estimate.

YL

Yuri Litvinov

10:53

grrrh... grhhh...

UP

Ulrich Popp

12:36

https://mastodon.popps.org/system/cache/media_attachments/files/106/308/385/340/300/943/original/b46d3aa1f2d8b22b.jpg (sorry, I couldnt resist)

LV

Laszlo Varga

12:37

In reply to [this message](#)

Classic 😊

RR

Rene Reifarh

15:36

No beam for the next 2–3 h (at least)

RR

Rene Reifarh

16:27

beam might be back ~5:30

R

Ragandeep

16:42

Beam is back 😊🙏

YL

Yuri Litvinov

16:43

One full shift(((

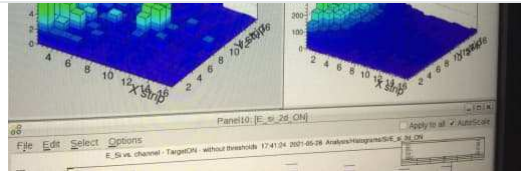
R

Ragandeep

17:42



E127: Proton capture on ^{118}Te



Rene Reifarh

Nice!

17:54

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