












ISCC 93: ISOLDE coordinator presentation

- Final Summary of 2021
- 2022 planning
- Around the hall: new setups
- CERN access
- Training

ISOLDE Schedule 2021: weeks 25 - 46












GPS schedule 2021

June			July			August					September				October				November					
25	26		27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46		
21	#730 Ti	28	5	12	19	26	#711 UC	2	9	16	23	30	#711 UC Ta	6	13	20	27	4	11	#732 LaC18	25	100 ¹	8	15
IS668/Coll s						(TBC) Colls			#567 Sn-VD5	#709 UC			#734 UC VD7				#534 Sn VD5							
			IS668	colls/TISD							LA1			Technical Stop										
	LA1		#xxx UC									(TBC) Collections	jeune G		IS689									
									IS647				LA1		212Rn @	XXX LIST								
	IS527				TISD		Stable + physics (if ready)	IS529	IS652				IS658		7.4MeV/ u			TISD (LIST)	IS647	#739 ZrO Ta				
									IS679										IS652					
																			IS679		IS675			
Surface	37K	RILIS: Mg	Surface				RILIS: Ca	RILIS: Ca	111Cd	RILIS : Au	RILIS : Au	RILIS : Ac		212Rn		RILIS: TBC	111Cd	RILIS: Sb/Sn(?)	RILIS: Zn	RILIS: Zn	RILIS: Dy/Se(?)			

ROC run not successful

Disappointing LIST run

HRS schedule 2021

June		July				August					September				October				November				
25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46		
21	28	5	12	IS622	#717 UC	2	9	16	23	30	6	#733 VO Ta	13	20	27	4	11	#740 UC Ta	18	25	1	8	15
			#653 UC n							#730 Ti	IS666										TBC UC/Ti		
		IS666 (sharing with GPS)			IS680 30Mg @ >7.5MeV/u		#732 La C			 (if ready) VITO stable or RIB	jeune G			#735 UC n		#738 CaO VD7						XT03 ACTAR >7.5MeV/u	Winter Physics period
IS660			IS622	IS666 (nights)				IS661		Possible sharing with GPS		IS625			IS667		IS678 (Wisard)	IS663		IS666	IS581		
RILIS: Ag		26Na	RILIS: Cu	26Na	RILIS: Mg	RILIS: Mg		RILIS: In		26Na /37K	26Na /37K	RILIS: Zn		RILIS: Te		32Ar	RaF		26Na/37K	209Fr/227Fr			

Beamgates not
operating to ISOLTRAP
requirements

IS701: Pb



Start of protons for physics: 21 June
End of protons for physics 15 November

Target change	CERN holiday	Setting up/proton scan/yield	Physics HPS	Physics GRS	RILIS run
------------------	-----------------	------------------------------------	----------------	----------------	--------------

Winter physics period

GPS

November				December	
11	15	16	17	48	49

HRS

November				December	
44	45	46	47	48	49

November-2021						
Mo	15	Start of YET5				8h
Tu	16	AUG LHC4				Up
We	17					
46	Th	18	PSEN update			
	Fr	19				
	Sa	20				
	Su	21				
Mo	22					
	Tu	23				
	We	24	AUG LHC2		SEH2	RTE BE1 out
47	Th	25	AUG LHC3		ME25 maintenance + TP ME3	
	Fr	26				
	Sa	27	AUG PS/PSB		ME16 maintenance	
	Su	28				
Mo	29					
48	Tu	30	TEST N/S		SEH2	Canalis

ISOLDE		Winter physics period									
ISOLDE Week 47 2021		RILS	GPS	HRS	CA0	MEDICIS	GPS IS	p/s	Visits	other	
Monday	22/11/2021	AM		IS063	HRS						
		PM		IS063	HRS						
		night		IS063	HRS						
Tuesday	23/11/2021	AM	#034 LIST target for TISO	IS063	HRS						
		PM		IS063	HRS						
		night		IS063	HRS						
Wednesday	24/11/2021	AM		IS063	HRS						
		PM		IS063	HRS						
		night		IS063	HRS						
Thursday	25/11/2021	AM		IS063	HRS						
		PM		IS063	HRS						
		night		IS063	HRS						
Friday	26/11/2021	AM		IS063	HRS						
		PM		IS063	HRS						
		night		IS063	HRS						
Saturday	27/11/2021	AM			HRS						
		PM			HRS						
		night			HRS						
Sunday	28/11/2021	AM			HRS						
		PM			HRS						
		night			HRS						
Monday	29/11/2021	AM			HRS						
		PM			HRS						
		night			HRS						

Summary of week: Winter physics programme continues. Machine will be put into safe mode for the AUG and diesel generator tests which will take place from 27 - 30 November

GPS: #734 UC VD7 for Xe beams. NOTE: use Ar bottle instead of mixed gas. Setup to GLM. HV = 30kV. #634 UC LIST for coupling and TISD tests.

HRS: #740 UC W for RaF beams. Setup at 40kV in bunched mode. Various RaF beams to CRIS, similar setup to week 43.

Protons: N/A


Operations responsible: Simon (165711) till Tuesday 23rd November. Emiliano (162582) till Tuesday 30th November

For more details about visits: <https://publicoutreach.cern.ch/outreach/panel#agenda/today>

ISOLDE Daily meeting: 09:15 Monday; 08:45 Tue-Fri via Zoom: <https://cern.zoom.us/j/98894210347?pwd=WU5SMlFkbkVlcWVkkYtNOG5nMkZlZDZkdz09>

TBC
TBC 7 or IS
TBC
TBC or IS
LIS: B

in W
er ph
irme
| test



ISOLDE Week 48 2021		RIJIS	GPS	WHS	CAO	MEDICIS	GPS IS	p's	Visits	oth
Monday	29/11/2021	AM		Machine put in safe mode for AUG tests and diesel tests Restart for IS663	HRS					
		PM			HRS					
		night			HRS					
Tuesday	30/11/2021	AM			HRS					
		PM			HRS					
		night		HRS						
Wednesday	01/12/2021	AM		IS663	HRS					
		PM	#635 UC	IS663	HRS					
		night		IS663	HRS					
Thursday	02/12/2021	AM	Checks of LI to Be ratio	IS663	HRS					
		PM	IS586	IS663	HRS					
		night		IS663	HRS					
Friday	03/12/2021	AM	IS586	IS663	HRS					
		PM	IS586	IS663	HRS					
		night		IS663	HRS					
Saturday	04/12/2021	AM		IS663	HRS					
		PM		IS663	HRS					
		night		IS663	HRS					
Sunday	05/12/2021	AM		IS663	HRS					
		PM		IS663	HRS					
		night		IS663	HRS					
Monday	06/12/2021	AM		IS663	HRS					
		PM			HRS					
		night			HRS					

Summary of week: Winter physics programme continues. Machine will be put into safe mode for the AUG and diesel generator tests which will take place from 27 - 30 November. Once AUG and diesel tests are completed, resume operation for RaF and Be collections to GLM.

GPS: #634 UC LIST for coupling and TISD tests. Setup to GLM and Magnetof HV = 30kV. #635 UC Ta (Be mass marker). ⁷Be collection at GLM.

HRS: #740 UC W for RaF beams. Setup at 40kV in bunched mode. Various RaF beams to CRIS, similar setup to week 43.

Protons: N/A

Operations responsible:Emiliano (162562) till Tuesday 30th November. Lefteris (166707) until Tuesday Dec 7th.

For more details about visits: <https://publicoutreach.cern.ch/outreach/panel#agenda/today>

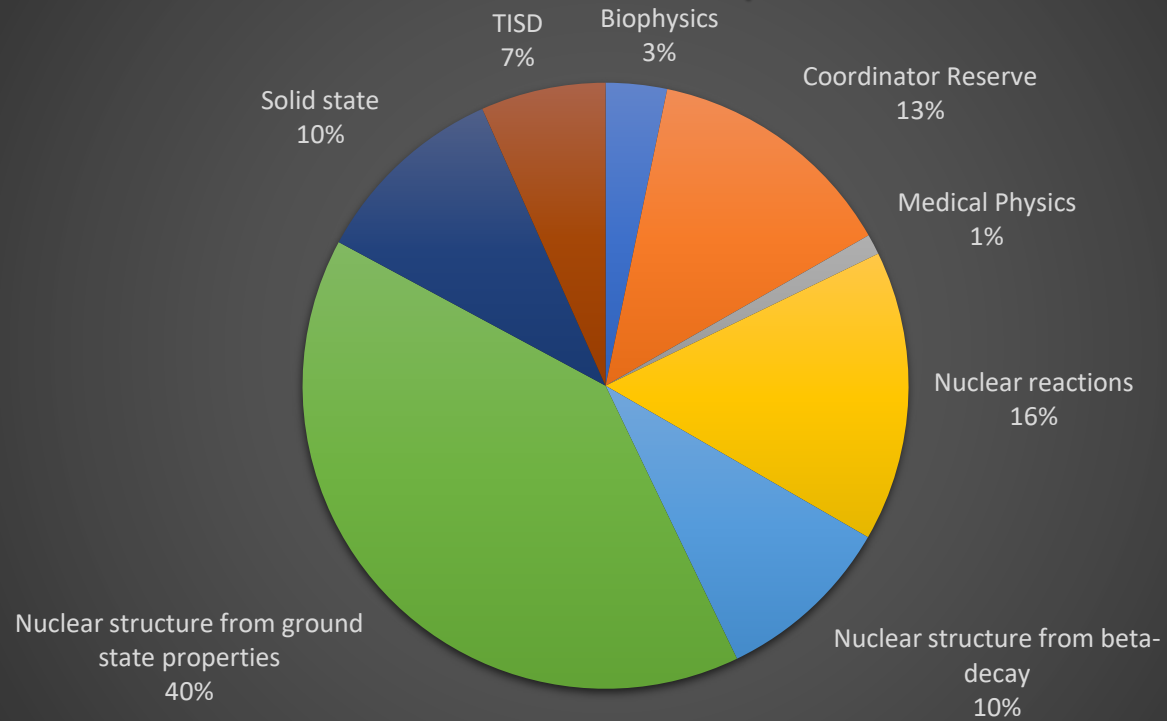
ISOLDE Daily meeting: 09:15 Monday; 08:45 Tue-Fri via Zoom: <https://cern.zoom.us/j/98894210347?pwd=WUTSMlFKbkVicWVhXytNOGSnMFNFdz09>

RILIS
run

KJ: 12.10.21

- Resuming the machine/run after the AUG cuts was quite painful.
- CRIS were finally able to continue, a lot of effort from the technical teams.
- On the limit of being worthwhile...2022 WP may dépend on when the AUG tests are

2021 Beam time pie



Row Labels	Count of Number	Sum of actual
Biophysics	3	12
Coordinator Reserve	1	49.5
Medical Physics	1	4
Nuclear reactions	4	57
Nuclear structure from beta-decay	4	35
Nuclear structure from ground state properties	9	147
Solid state	9	38.5
TISD	1	24.5
Grand Total	32	367.5

Row Labels	Sum of Shifts remaining after 2021 till end of Run3	Count of Count
biophysics	9.5	1
COLLAPS	39	4
Collections: 108Ag	30	1
Collections: 163Ho	5	1
CRIS	86.5	7
Gandalph	8	1
Gandalph/CRIS	6	1
HIE ISOLDE	493	32
ISS	97	9
Miniball	275	17
Prototype	0	1
SEC	23	1
XT03	23	1
XT03: Actar	21	1
XT03: Corset	12	1
XT03: Edinburgh	42	1
IDS	159.5	14
IDS/ISOLTRAP	6	1
ISOLTRAP	43	5
Medical physics	11	2
MIRACLS	17	1
SSP	97.5	11
TAS	53	4
TISD	31	7
TISD/IDS	9	1
Travelling Setup	10	2
Travelling Setup; ECSLI	0	1
VITO	14	1
WISARD	14	1
Grand Total	1142	99

ISOLDE backlog before next week's INTC

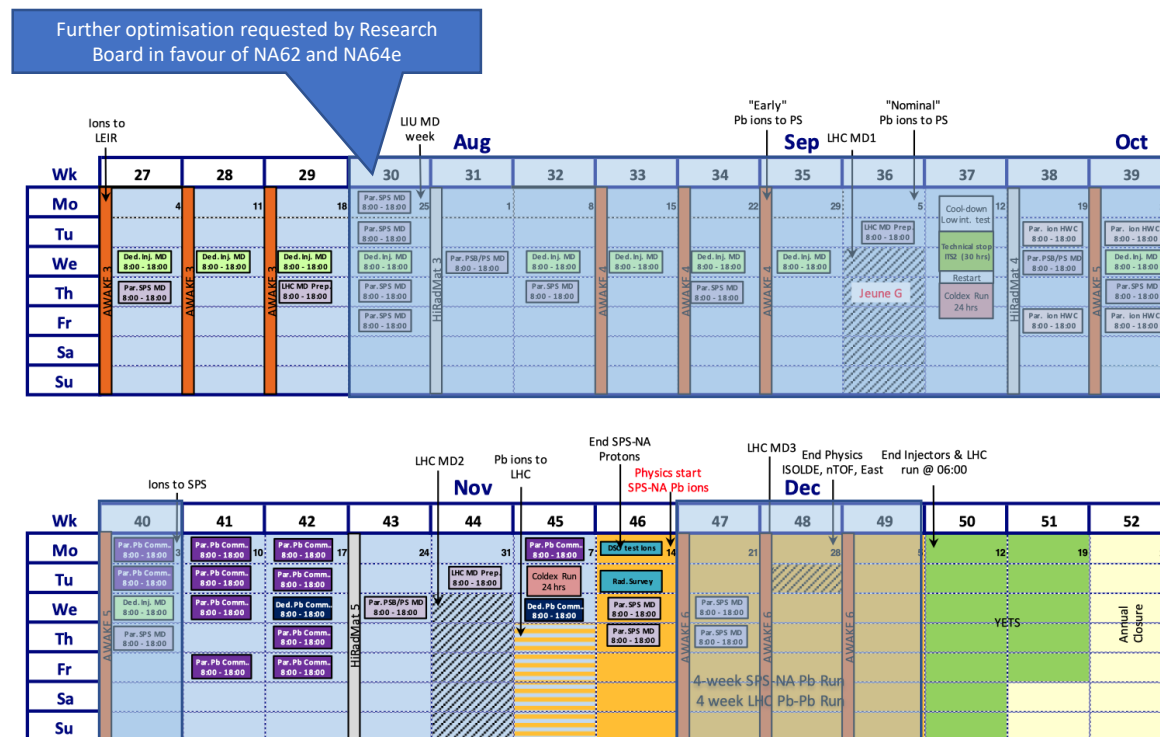
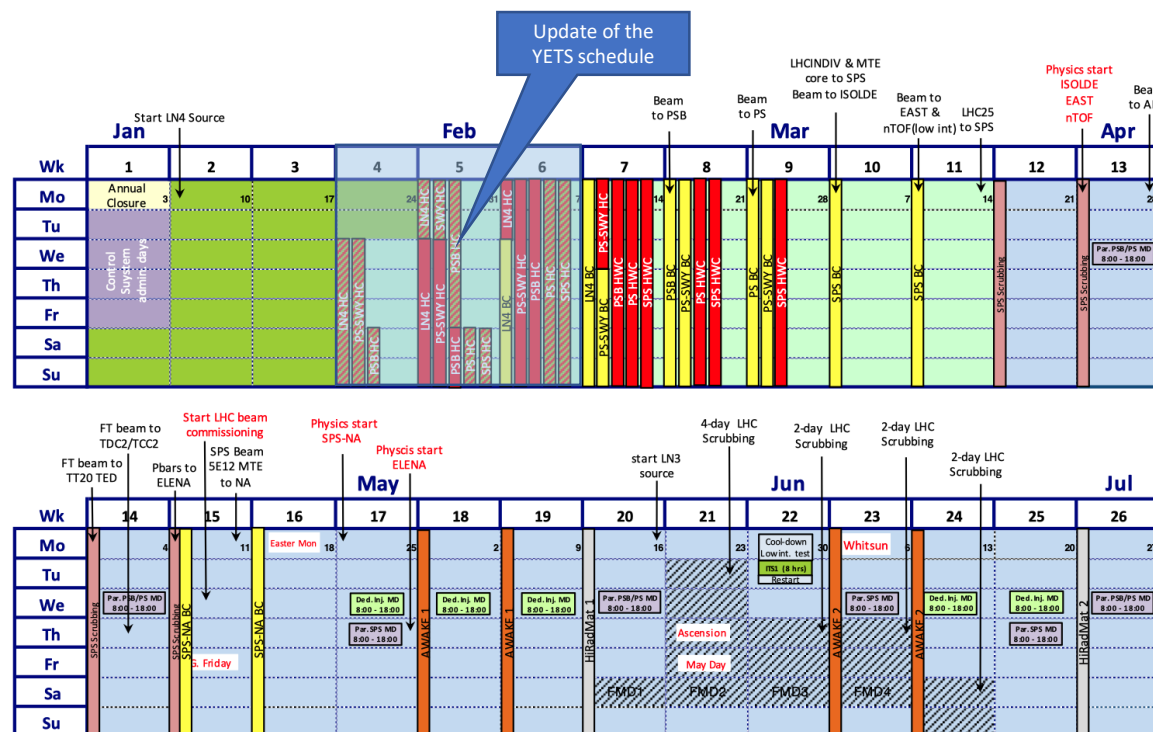
Most difficult part of backlog is HIE ISOLDE and miniball in particular.

Summary of INTC 69

Row Labels	Count of Title	Sum of Shifts requested
ISOLDE	11	149
Biophysics	1	14
IDS	1	11
ISS	3	55
TISD	1	6
TISD/HIE	1	4
TISD/TDPAC	1	4
Weak Interaction	1	10
Miniball	2	45
n_TOF	2	0
(blank)	2	0
Grand Total	13	149

<https://indico.cern.ch/event/1112243/>

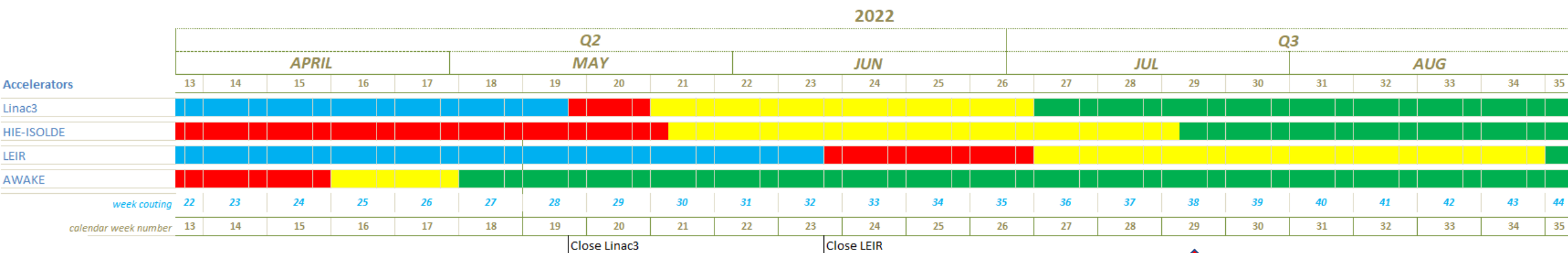
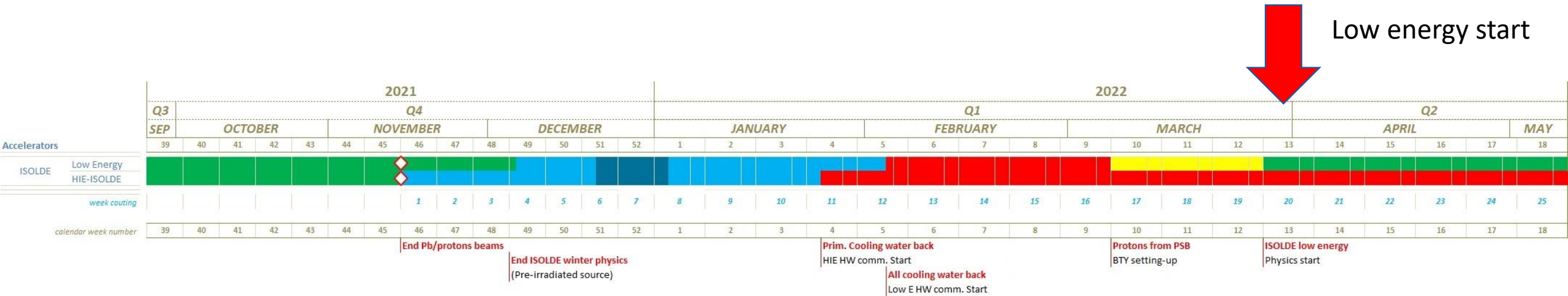
Draft Accelerator schedule for 2022



- ISOLDE physics start: March 28th
- End of protons, not necessarily of physics: November 28th (but short period for winter physics).
- 245 days of physics
- Also very high demand throughout the complex. Number of supercycles could be limited at times.
- In close discussion with PS/SPS coordinator on how best to balance the request for protons.

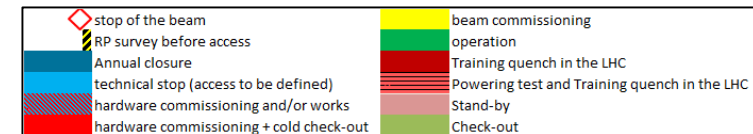
Experimental facility	Start Physics	End Physics	Duration 2022 [days]*	Duration 201
-----------------------	---------------	-------------	-----------------------	--------------

ISOLDE commissioning programme in 2022



- 245 days for physics but, only ~131 days for HIE-ISOLDE. Could even be shorter if AUG tests are around early Dec
- The annual warm-up of the cryoplant is very limiting.
- Need to continue to work on a better solution e.g. 2nd compressor station

HIE-ISOLDE start



Beam requests for 2022

Beam requests were received before Christmas.

As can be seen: very high demand

Miniball will be back in 2022, but no T-REX this year.

Almost 50% of the shift request for HIE ISOLDE but only 50% of the running period possible.

Beam request for ISOLDE 2022*

Estimated ISOLDE running period: March 14th 2022 to November 29th 2022
PLEASE COMPLETE ALL INFORMATION REQUESTED AND RETURN BY December 30th 2021

Experiment **INT-C-171**

Towards laser spectroscopy of exotic fluorine isotopes

Spokesperson: Ronald Fernando Garcia Ruiz
Spokesperson email: rgarcia@mit.edu
Contact person: Ronald Fernando Garcia Ruiz
Contact email: rgarcia@mit.edu
Shifts approved for Run3: 13

If you require stable beam or commissioning time for a detector or setup, please fill out the separate request for in the attached document.

What is the main ISOLDE limitation for your experiment/experimental programme?

Can you tune the ISOLDE stable beam to your setup without technical assistance?
Yes ☐ No ☐

Please list/update the name and affiliation of collaborators working on this ISOLDE experiment: INT-C-171

Comments and suggestions

In the two attached Excel templates:

- list the publications originating from **INT-C-171**, not included in your last beam-time request
- fill in your beam-time request 2021

* Please e-mail the completed form to karl.johnston@cern.ch

Row Labels	Count of Experiment	Sum of Requested shifts
Biophysics	1	5
COLLAPS	2	22
CRIS	6	61
HIE	32	394
ACTAR	1	21
ISS	10	104
Miniball	17	184
XT03	1	23
XT03: Edinburgh	1	42
XT03: SEC	2	20
IDS	10	76
IDS	1	15
IDS / ISOLTRAP	1	6
IDS/TAS	2	7
IDS/TISD	1	2
In-source/IDS	2	10
ISOLTRAP	1	8
Medical	3	12
MIRACLS	3	0
SSP	26	57.5
TAS	2	37
TISD	10	27
VITO	4	23
Wisard	1	24
ISOLTRAP/TISD	1	31
Grand Total	109	817.5

Initial plan/limitations for 2022

Discussions ongoing with various groups for the first weeks of the schedule. Covid contaminations and recovery from operations have affected some groups.

Also delivery of components have delayed some plans.

First draft should be available by end of next week.

Again, like 2021, first weeks will favour local groups due to covid issues.

IDS should have a busy year after a relatively quiet 2021.

Planning for first ~10 weeks will be released soon.

Then updated through the year: up to HIE ISOLDE period; then mid Autumn then end of year, including winter physics if this is possible.

ID [####]	Material	Ion source	Experiment	Beam line	Comment
678			Facility		Plug target
637 UC2C	W-surface		TISD	GPS	Re-used
732 LaC2	Ta-surface		IS661	HRS	
534 Sn	VD5		IS647IS652IS679	GPS	
733 Y2O3	Ta-surface		IS625	HRS	Fe contamination (Laser ionized)
734 UC2C	VD7		IS689	GPS	Interesting for TISD
735 UC2C-n	Ta-surface		IS701	HRS	converter not used / 4.3E18 pot
634 UC2C	LIST		TISD	GPS	New, but old base
738 CaO	VD7		IS678	HRS	
740 UC2C	W-surface		IS663	HRS	Florinated
739 ZrO2	Ta-surface		IS675	GPS	
743 Ti-foils	Ta-surface		IS666	HRS	
627 Ta-foils	Ta-surface		IS688	GPS	
619 Lead	VD5				
626 Ta-foils					
717 UC2C	Ta-surface		IS680	HRS	
638 UC2C	Re-surface		TISD		Re-used
715 UC2C	Ta-surface		IS666	HRS	
635 UC2C	Ta-surface				Be collections
641 UC2C	Ta-surface				Mg/In Had 5E18 potbefore LS2 and higher POT compared to equiv. from above
654 UC2C-n	W-Surface				K / 4E18 potbefore LS2 and higher POT compared to equib from above

Some supply issues also affecting targets: limited number of bases in stock, to be shared with Physics, development and MEDICIS.

Good stock of used targets for some of the early runs.

Some «exotic» units expected e.g. quartz lines. Required for some of the physics runs, but also to allow for transfer of expertise. Upcoming retirement of Ermanno...

Follow-up on using ASM for ISOLDE schedule...

ISOLDE HRS Jan 29, 2021 ver.1.0

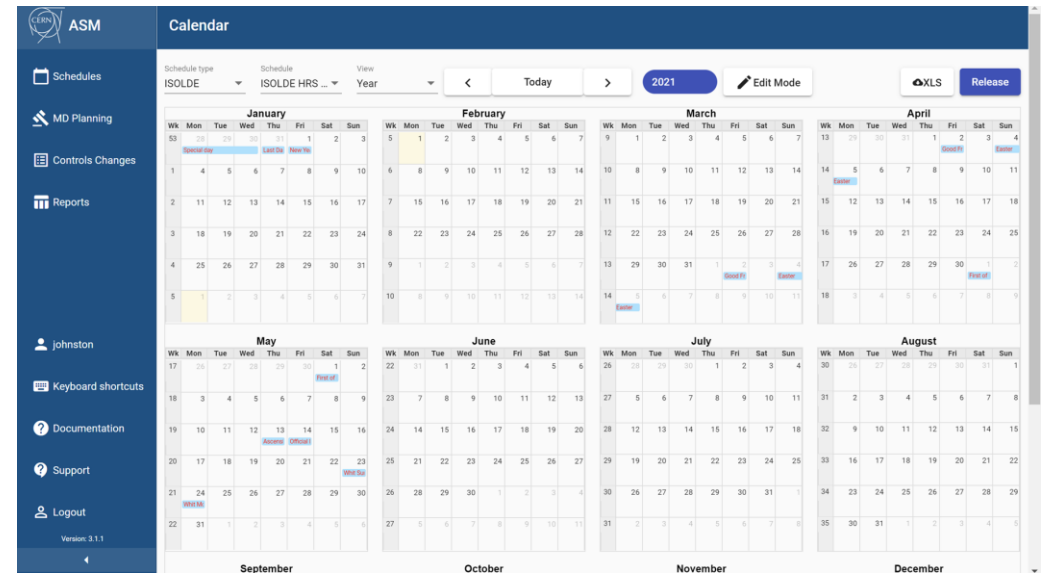
WK	2	3	4	5	6	7	8	9	10	11	12	13	14
Mo	4	11	18	25	1	8	15	22	1	8	15	22	29
Tu													
We													
Th													
Fr													
Sa													
Su													

	Apr			May				June							
WK	15	16	17	18	19	20	21	22	23	24	25	26	27		
Mo	Gender		12	19	26	3	10	17	White Monday	23	31	7	14	Spot of postponed physics	28
Tu															
We															
Th						Evolution									
Fr						Official holiday									
Sa				First of May											
Su							White Sunday								

WK	28	29	30	31	32	33	34	35	36	37	38	39	40
Mo	5	12	19	26	2	9	16	23	30	6	13	20	27
Tu													
We													
Th													
Fr													
Sa													
Su													

WK	41	42	43	44	45	46	47	48	49	50	51	52	1
Mo	4	11	18	25	1	8	15	22	29	6	13	20	
Tu													
We													
Th													
Fr													
Sa													
Su													

Official Holidays (5d 0h) Physics run (1d 0h)

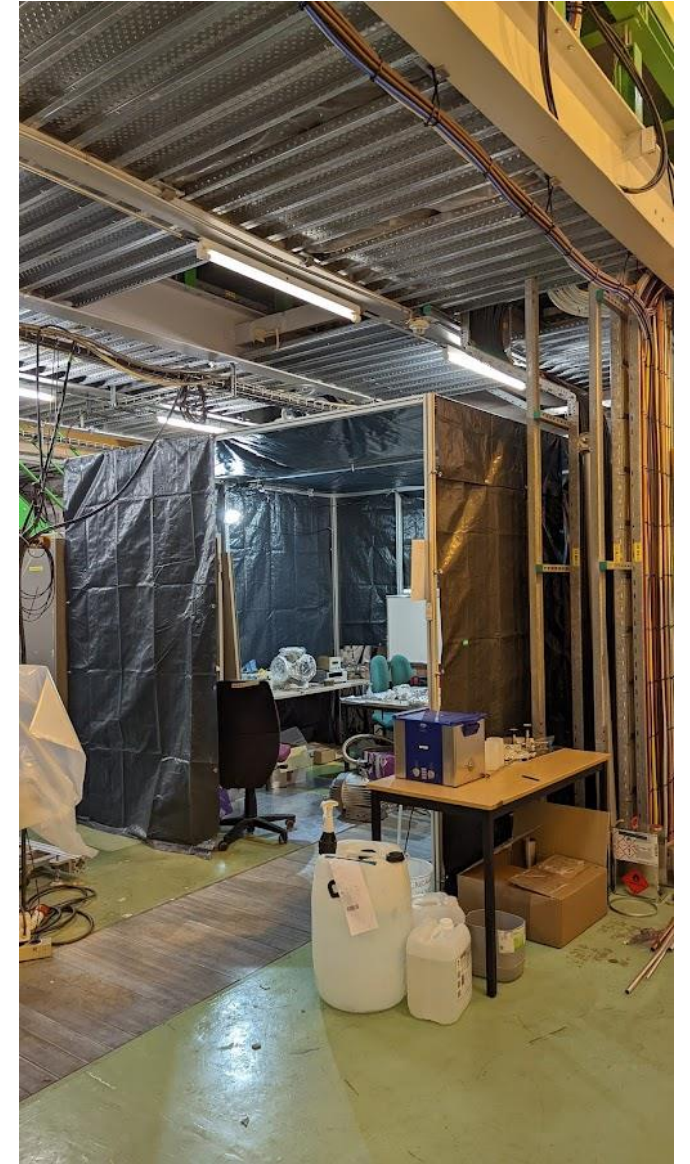
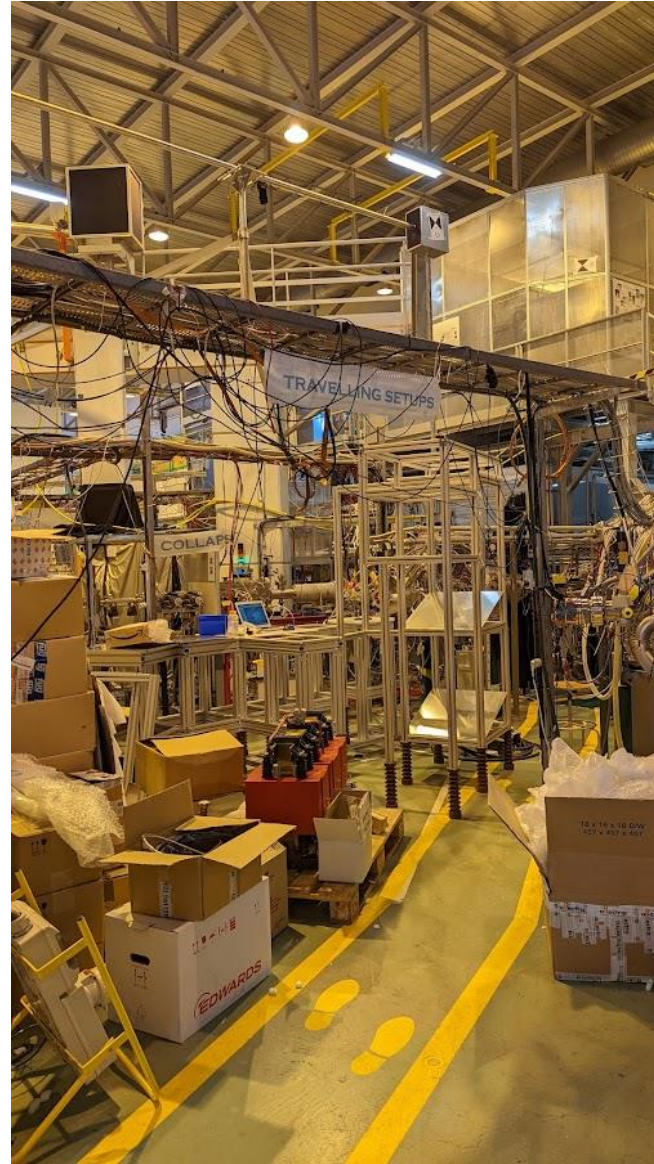


- ISOLDE schedules have been integrated into ASM
- Export to excel view, weekly, monthly and annual schedules etc....
- <https://asm.cern.ch/schedules/calendar?type=ISOLDE&schedule=ISOLDE%20HRS&version=1.0&state=Draft&view=year>

- However, ASM lives on technical network and not accessible outside CERN.
- Not very useful for users.
- For now will continue with normal all-in-one schedule and weekly planning.

Around the hall

MIRACLS installation at LA2 and
old NICOLE space



NICOLE equipment: Collaboration have until **Feb 8** to claim equipment, in line with the CERN general conditions. Otherwise it will be disposed or transferred to other interested groups. Then area will be cleared for «safe» space for HIE ISOLDE experiments.



New mezzanine for storage of e.g. laser boxes in the ISOLDE SAS



From ISCC 87: Feb 2020

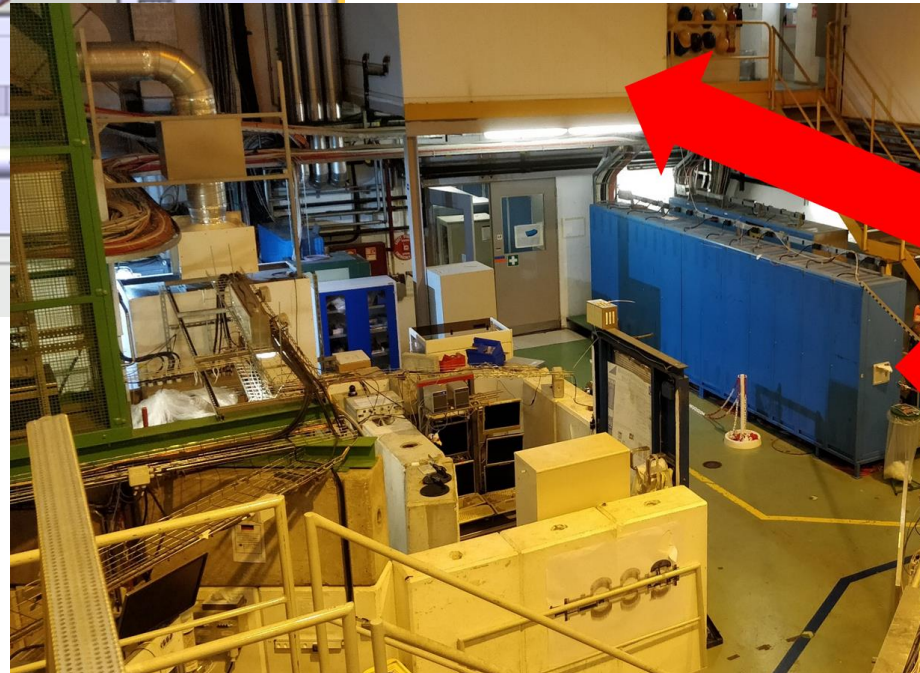
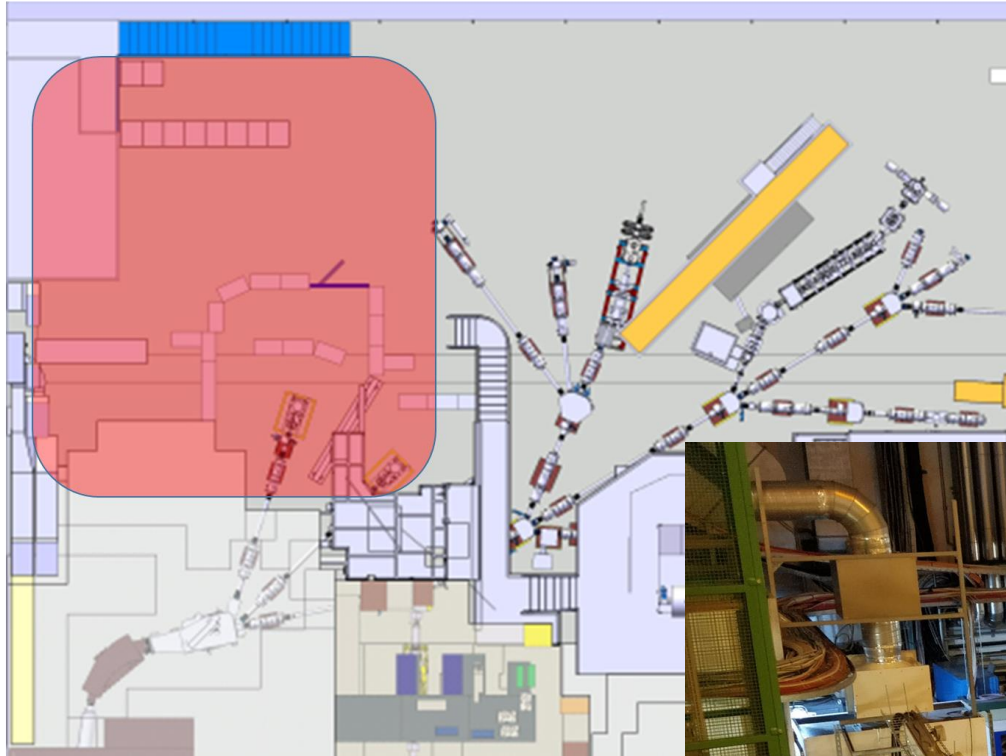
Longer term....

With the new control room in 508, this area could be optimized...LS3?

Toilet removal

Power supplies moved up to a platform

Could allow for reconfiguration of beamlines at GLM/GHM and ASPIC/MULTIPACS?



Consolidation proposal now being worked on



SY-EPC-FPC
Fast Pulsed Power Converters



European Organization for Nuclear Research
Organisation européenne pour la recherche nucléaire

Project ID
ISOLDE

Sub-Project ID
ISOLDE-REX_Cons

Document Owner
David Nicolas

Equipment Code
EquipCode

EDMS Document No.
2680165

Document Revision: 1.0 (Draft)
Last Revision Date: 2021-01-10

Note

ISOLDE-REX_CONS
ISOLDE BAT170 – 2-101 & 2-102

Abstract

This document describes the proposition of the reuse of the 170-2-101 and 2-102 areas for the location of the new power converters in the frame of the SY-EPC "ISOLDE-REX_Cons" project.

Author(s) / Involved Person*(s):
Nicolas DAVID [SY-EPC]

Distribution List:
Davide AGUGLIA [SY-EPC]
Julien-PARRA-LOPEZ [SY-EPC]
Erwin SIESLING [BE-OP]
Joachim VOLLAIRE [SY-STI]

Reference(s):

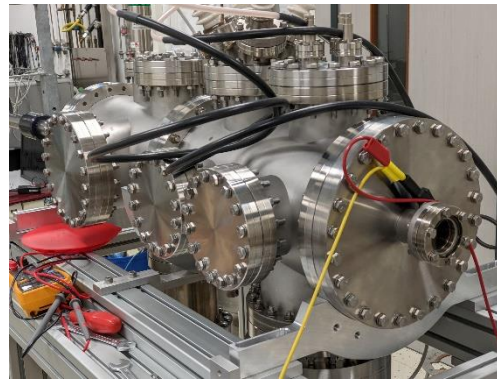
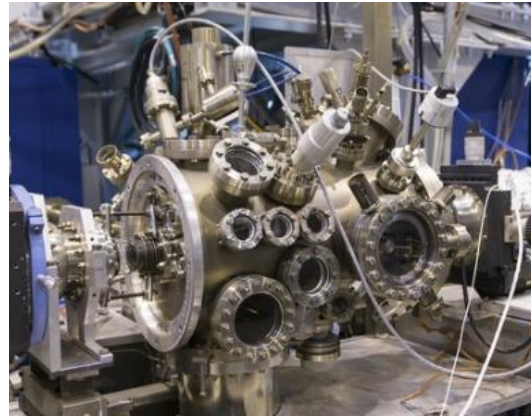
History of Changes

Rev. No.	Date	Pages	Description of Changes
1.0	2021-01-10		Document creation

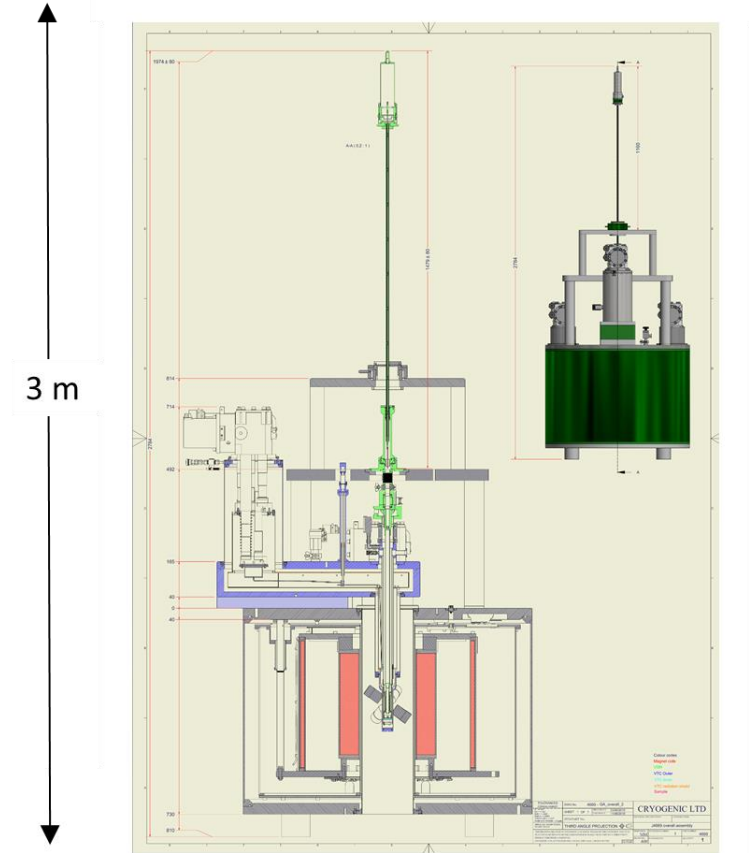
New setups which are imminent (either here or later in 2022)



New Mossbauer setup(s)



Modified surface science setup: temporary @LA2 an option when MIRACLS leaves, but would benefit from more permanent installation. (should probably be discussed at future ISCC)



Multipac magnet: April 2022
Will go to 275 for testing.
Longer term?

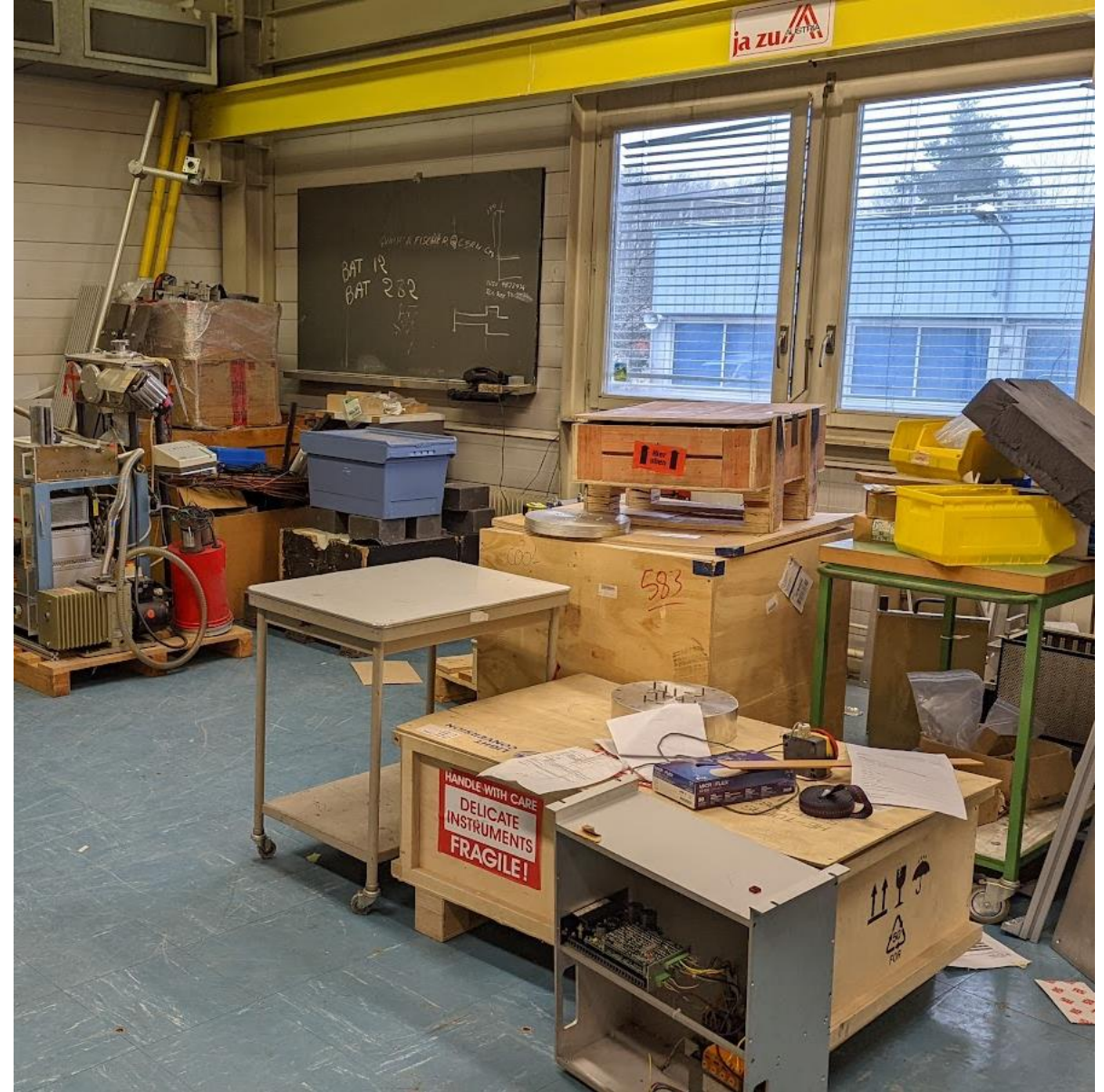


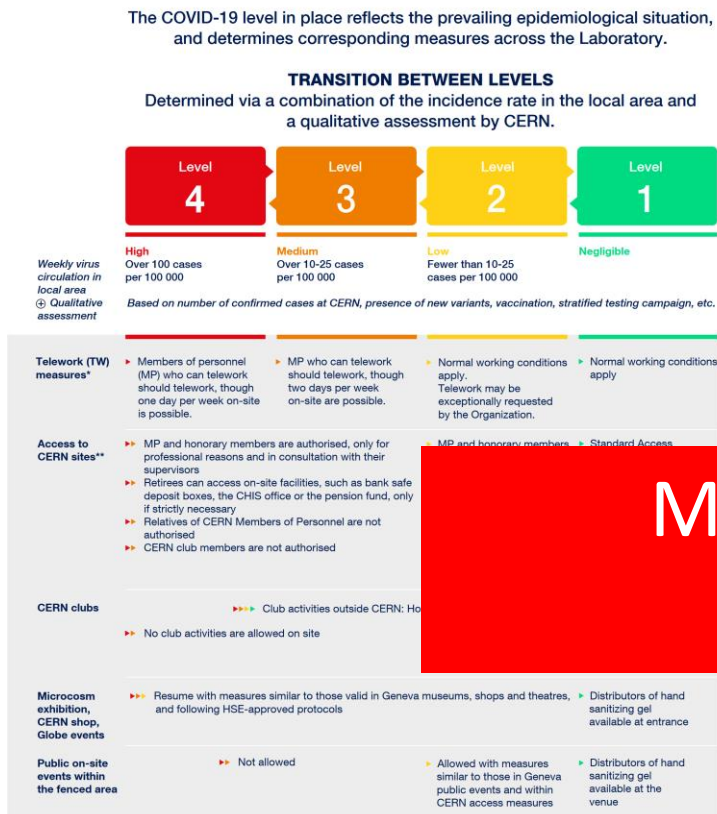
New CRIS line being assembled in 275

ROC setup being prepared in 275



Many thanks to Tim Lellinger for assisting with space clearance





* Measures do not apply to those members of the personnel who cannot telework or whose presence on-site is needed for carrying out the ongoing activities of the Organization.
** With the ramping up of Host-State vaccination campaigns, access conditions have been revised and now apply across all age groups.

Vulnerability to COVID-19
It is the responsibility of each person to declare a vulnerability.
For people with a declared vulnerability, specific protection plans must be defined, independently of the COVID-19 level in place.

Please note
Measures such as washing hands, wearing masks, keeping distance, self-isolation and quarantine, duty-travel and space-occupancy restrictions remain in place at least until virus circulation is assessed as low.

CERN currently in level RED

Telework (TW) measures*	<ul style="list-style-type: none"> Members of personnel (MP) who can telework should telework, though one day per week on-site is possible. 	<ul style="list-style-type: none"> MP who can telework should telework, though two days per week on-site are possible. 	<ul style="list-style-type: none"> Normal working conditions apply. Telework may be exceptionally requested by the Organization. 	<ul style="list-style-type: none"> Normal working conditions apply
Access to CERN sites**	<ul style="list-style-type: none"> MP and honorary members are authorised, only for professional reasons and in consultation with their supervisors Retirees can access on-site facilities, such as bank safe deposit boxes, the CHIS office or the pension fund, only if strictly necessary Relatives of CERN Members of Personnel are not authorised CERN club members are not authorised 	<ul style="list-style-type: none"> MP and honorary members are authorised, only for professional reasons and in consultation with their supervisors Retirees can access on-site facilities, such as bank safe deposit boxes, the CHIS office or the pension fund, only if strictly necessary Relatives of CERN MP are authorised CERN Club members are authorised, respecting rules for club activities 	<ul style="list-style-type: none"> MP and honorary members are authorised, in consultation with their supervisors Retirees can access on-site facilities Relatives of CERN MP are authorised CERN Club members are authorised, respecting rules for club activities 	<ul style="list-style-type: none"> Standard Access Standard Access Standard Access Standard Access
CERN clubs	<ul style="list-style-type: none"> Club activities outside CERN: Host State regulations apply 			
Public on-site events within the fenced area	<ul style="list-style-type: none"> Not allowed 	<ul style="list-style-type: none"> Allowed with measures similar to those in Geneva public events and within CERN access measures 	<ul style="list-style-type: none"> Allowed with measures similar to those in Geneva public events and within CERN access measures 	<ul style="list-style-type: none"> Distributors of hand sanitizing gel available at the venue

* Measures do not apply to those members of the personnel who cannot telework or whose presence on-site is needed for carrying out the ongoing activities of the Organization.
** With the ramping up of Host-State vaccination campaigns, access conditions have been revised and now apply across all age groups.

Vulnerability to COVID-19
It is the responsibility of each person to declare a vulnerability.
For people with a declared vulnerability, specific protection plans must be defined, independently of the COVID-19 level in place.

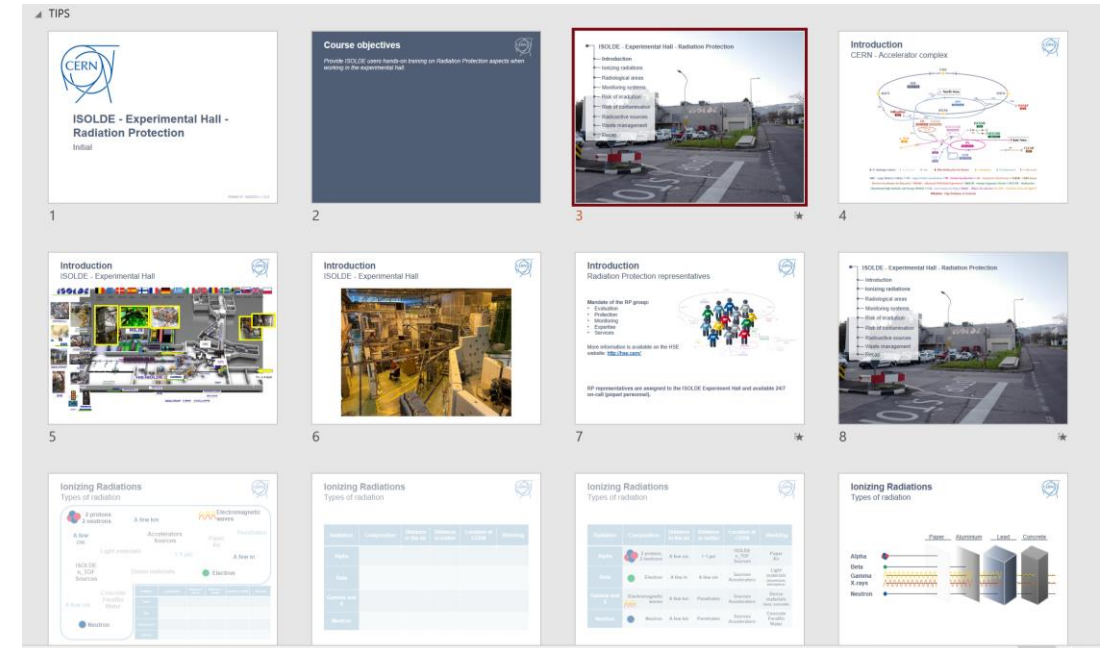
Please note
Measures such as washing hands, wearing masks, keeping distance, self-isolation and quarantine, duty-travel and space-occupancy restrictions remain in place at least until virus circulation is assessed as low.

Training

- In addition to the (ever-growing) number of online courses...
- Hands-on RP and Electrical training
- 15 day deadline before scheduled course is cancelled. (has led to issues last year)
- New EP-wide electrical course for all users/staff who need to work in an experimental area.
- Both will take place on Tuesday but time has increased:
 - EP course 0830 till 1230
 - RP course 1400 till 1630
- Availability of Electrical course not very stable. **Taking all online courses will grant electrical training ranks (for the moment at least).** Long term users based at CERN should try to take it when possible.

Ad hoc sessions are available, but (especially in running period!!) are difficult to manage

- A lot of new local representatives e.g. VITO, WISARD, Miniball etc. Training e.g. crane/cryo courses proving difficult due to covid restrictions.
- Mini-separator course for locals to be organised in March. Videos for external users to be released before running period.



In LMS:

ISOLDE - Experimental Hall - Radiation Protection - Handling (Covid-19)

Electrical Safety - Working in EP experiments