



INTC 69: 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	5	12	19	26	#711 UC	9	16	23	30	#711 UC Ta	13	20	27	4	11	#732 LaC18	25	1	8	15
IS668/Coll		IS668	colls/TISD		(TBC) Colls			#567 Sn-VD5	#709 UC			#734 UC VD7	IS668			#534 Sn VD5			IS675	IS668	
	LA1	#xxx UC				COLLAPS	COLLAPS		LA1	(TBC) Collections	jeune G		IS689			IS647	IS673 (TISD)		#627 Ta	(nights)	
	IS527			TISD		Stable + physics (if ready)	IS529	IS647	IS665		LA1		212Rn @ 7.4MeV/u	XXX LIST	TISD (LIST)	IS652	#739 ZrO Ta	IS675		(TBC)	Winter Physics period
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(?)	

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 YO Ta	13	20	27	4	11	#740 UC Ta	18	25	1	8	15
		IS666 (sharing with GPS)	#653 UC n	IS666 (nights)	IS680 30Mg @ >7.5MeV/u				IS661		#730 Ti	IS666	jeune G		#735 UC n	#738 CaO VD7			TBC UC/Ti				
CRIS									IS666	(if ready) VITO stable or RIB	Possible sharing with GPS	IS625		COLLAPS		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		

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
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Winter physics period

GPS					HRS				
November					December				
11	15	16	17	18	19	20	21	22	23

November-2021	
Mo	15 Start of YETS
Tu	16 AUG LHC4
We	17
Th	18 PSEN update
Fr	19
Sa	20
Su	21
Mo	22
Tu	23
We	24 AUG LHC3
Th	25
Fr	26
Sa	27 AUG PS/PSB
Su	28
Mo	29
Tu	30 TEST N/S

ISOLDE Week 47 2021	RILIS	GPS	HRS	CA0	MEDICIS	GPS IS	p's	Visits	other
Monday 22/11/2021			IS663	HRS					
Tuesday 23/11/2021		#634 LIST target for TISD	IS663	HRS					
Wednesday 24/11/2021			IS663	HRS					
Thursday 25/11/2021			IS663	HRS					
Friday 26/11/2021			IS663	HRS					
Saturday 27/11/2021			IS663	HRS					
Sunday 28/11/2021			IS663	HRS					
Monday 29/11/2021			IS663	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 (162562) 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/86894210347?pwd=WUdMPTkxVjcwVWkyeDNOd0pMNFZkdz09>

TBC
 TBC 70
 or ISS
 TBC
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ISOLDE Week 48 2021	RILIS	GPS	HRS	CA0	MEDICIS	GPS IS	p's	Visits	other
Monday 29/11/2021			IS663	HRS					
Tuesday 30/11/2021			IS663	HRS					
Wednesday 01/12/2021		#635 UC	IS663	HRS					
Thursday 02/12/2021			IS663	HRS					
Friday 03/12/2021			IS663	HRS					
Saturday 04/12/2021			IS663	HRS					
Sunday 05/12/2021			IS663	HRS					
Monday 06/12/2021			IS663	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. Leiferis (166707) until Tuesday Dec 7th.

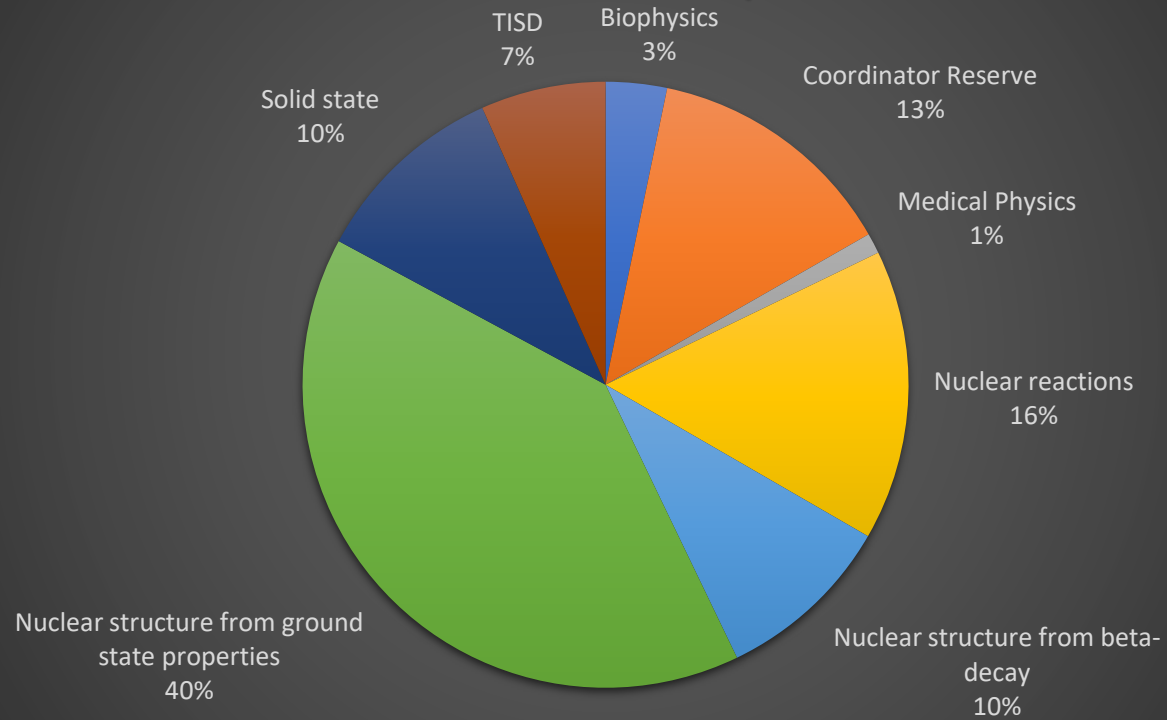
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RILIS run

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 Winter Physics may depend 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 this meeting

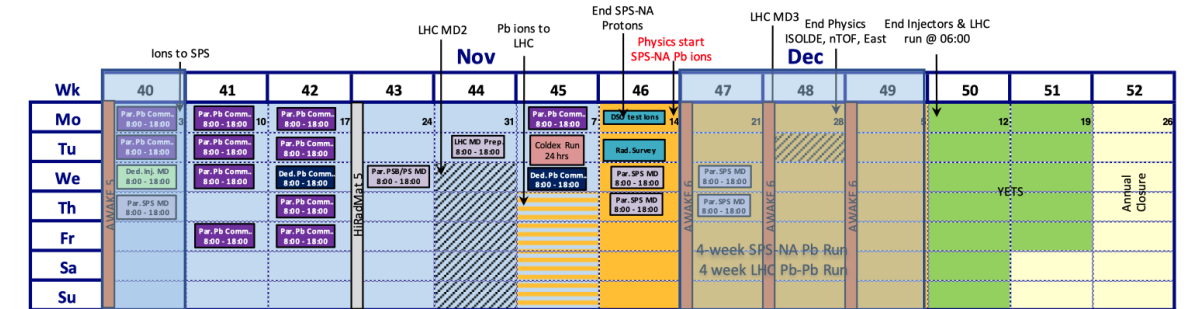
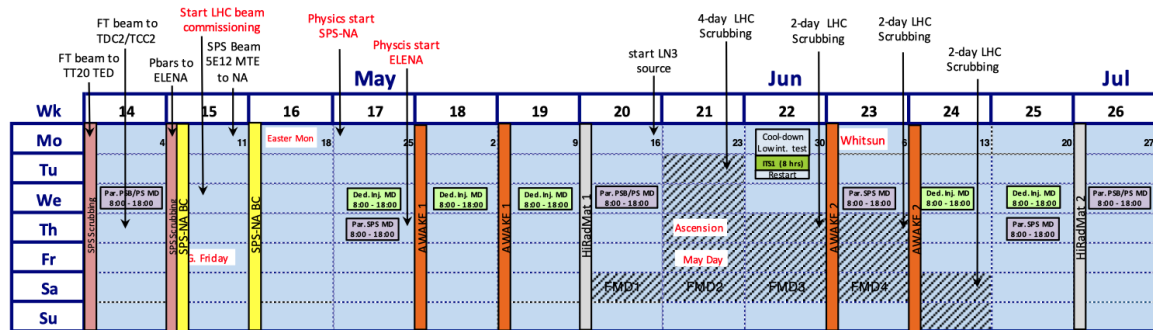
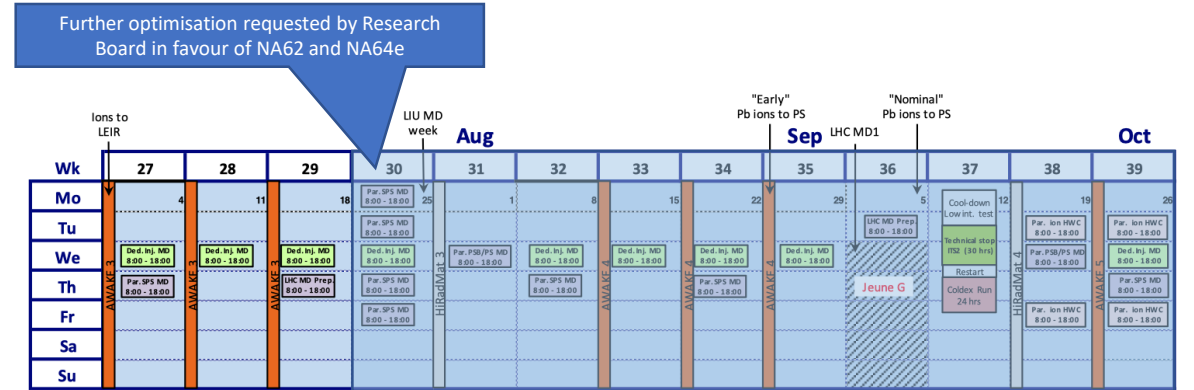
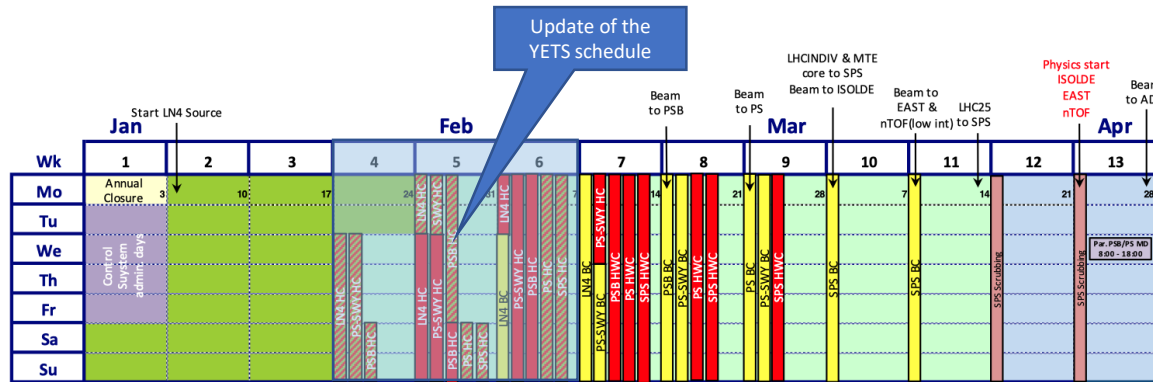
Most difficult part of backlog is HIE ISOLDE and Miniball in particular.

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

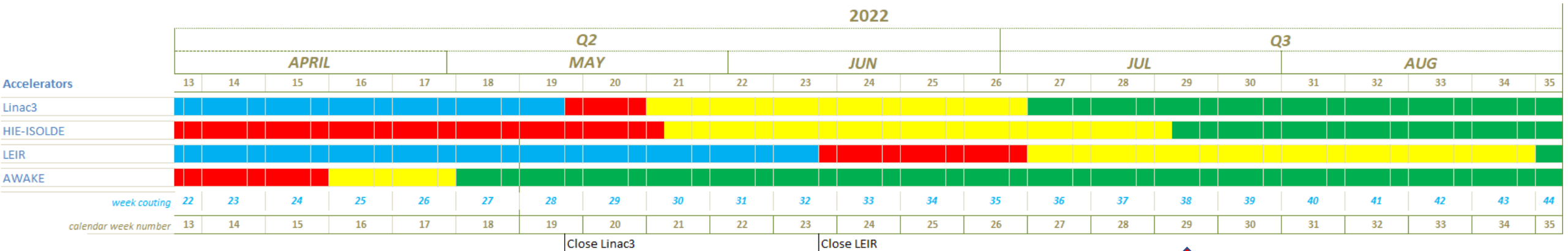
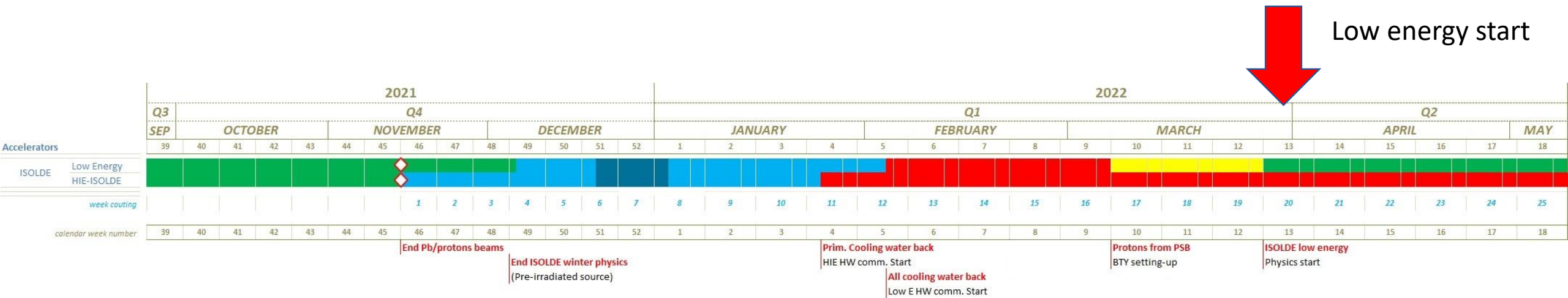


- ISOLDE physics start: March 28th
- End of protons, not necessarily of physics: November 28th (but short period for winter physics).
- 245 days of physics
- Also very high demand throughout the complex. Number of supercycles could be limited at times.
- In discussion with PS/SPS coordinator on how best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

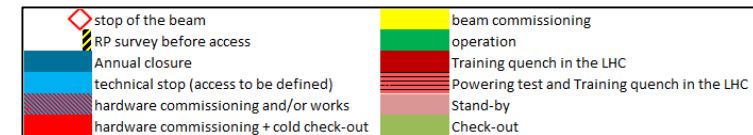
Experimental facility	Start Physics	End Physics	Duration 2022 [days]*	Duration 2018 [days]*
ISOLDE	28.03.2022	28.11.2022	245	217
nTOF	28.03.2022	28.11.2022	245	224
PS East Area	28.03.2022	28.11.2022	245	224
SPS North Area p ⁺	25.04.2022	14.11.2022	203	217
ELENA (AD)	28.04.2022	12.12.2022	228	196
SPS North area Pb ions	14.11.2022	12.12.2022	28	28
AWAKE	02.05.2022	12.12.2022	84	91
HiRadMat	16.05.2022	31.10.2022	35	25

*TS, MD time, etc. not deducted

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.



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 INTC-1-171
 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: INTC-1-171

Comments and suggestions

In the two attached Excel templates:

- list the publications originating from INTC-1-171, not included in your last beam-time request
- fill in your beam-time request 2021

* Please e-mail the completed form to karl.johnston@boern.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 is being discussed with first groups.

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

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 target experts.

Follow-up on call for LOIs:Feb 2020 (Space in the hall)



CERN-INTC-2020-008 / INTC-I-211
08/01/2020

Letter of Intent to the ISOLDE and Neutron Time-of-Flight Committee

eMMA - Development of an emission Mössbauer apparatus at ISOLDE for the investigation of magnetic materials

[8.01.2020]



New Mossbauer setup(s): no space issues

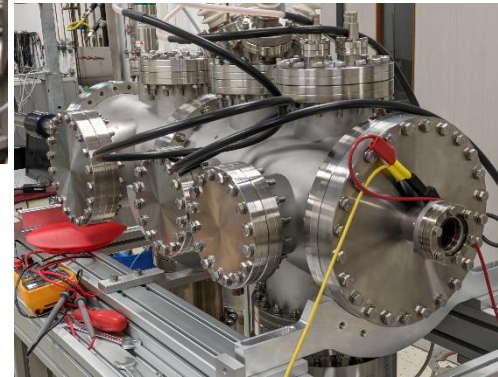


CERN-INTC-2020-001 / INTC-I-208
06/01/2020

Letter of Intent to the ISOLDE and Neutron Time-of-Flight Committee

Upgrade of the UHV-system ASPIC for the investigation of surfaces and two-dimensional materials by ultra-low energy implantation and deposition of radioactive probe atoms

[6.01.2020]



Modified surface science setup: temporary @LA2 an option when MIRACLS leaves, but would benefit from more permanent installation.



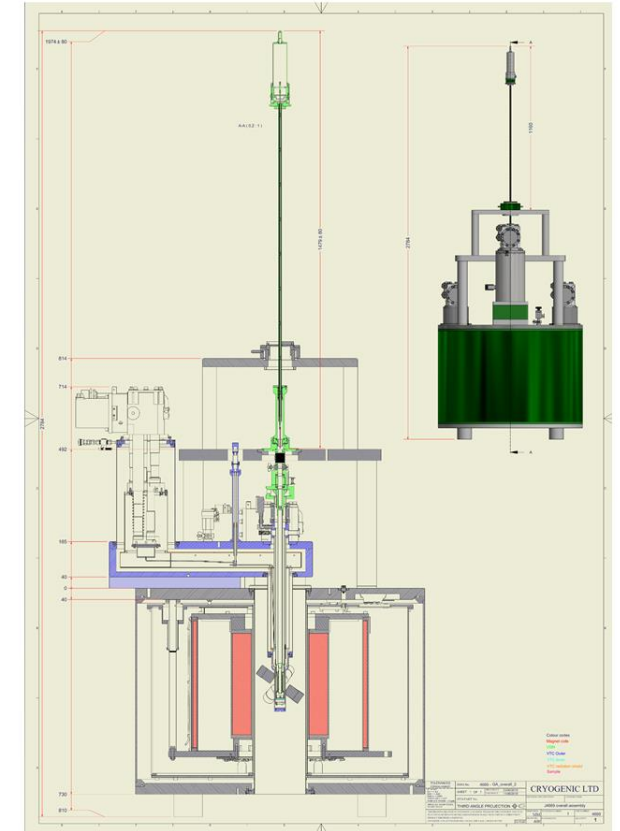
CERN-INTC-2020-011 / INTC-I-212
10/01/2020

Letter of Intent to the ISOLDE and Neutron Time-of-Flight Committee

MULTIPAC-Setup for γ - γ Perturbed Angular Correlation Experiments in Multiferroic (and Magnetic) Materials

January 8th 2020

3 m



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



CERN-INTC-2020-015 / INTC-I-215
13/01/2020

**MIRACLS- the Multi Ion Reflection Apparatus for Collinear
Laser Spectroscopy of radionuclides**

January 11, 2020

MIRACLS installation at LA2 and
old NICOLE space. PUMA
installation also being closely
followed.

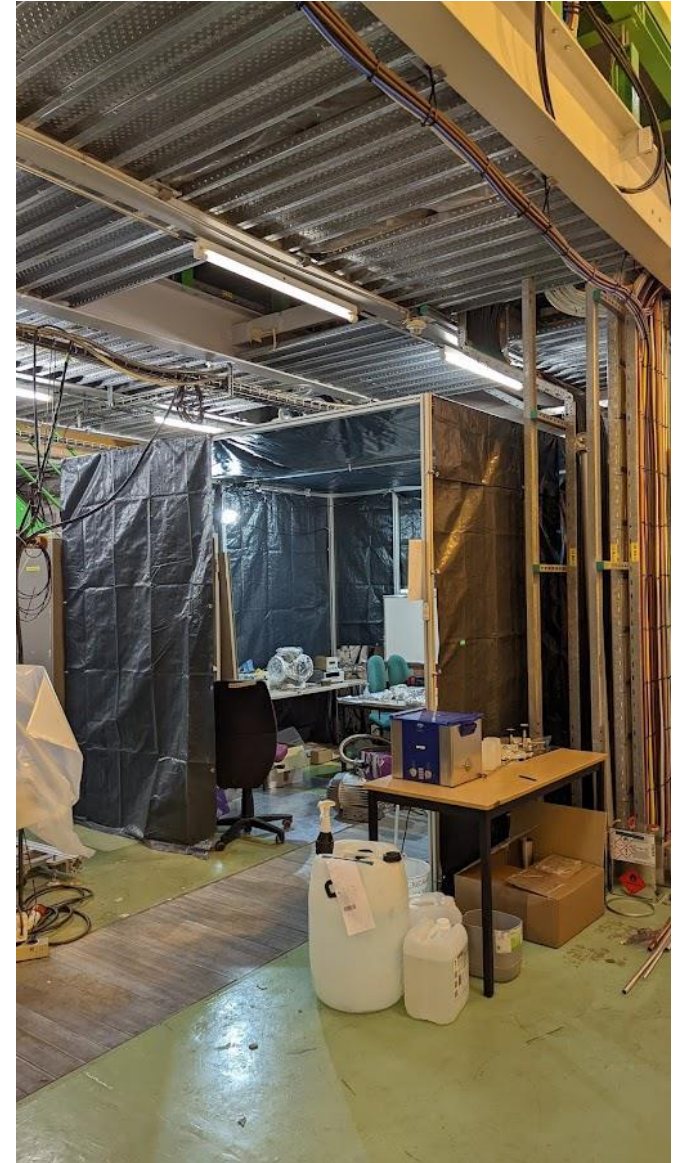


CERN-INTC-2020-003 / INTC-I-209
08/01/2020

Letter of Intent to the ISOLDE and Neutron Time-of-Flight Committee

PUMA: antiProton Unstable Matter Annihilation

January 6, 2020



CERN'S COVID-19 SCALE AND MEASURES



The COVID-19 level in place reflects the prevailing epidemiological situation, and determines corresponding measures across the Laboratory.

TRANSITION BETWEEN LEVELS

Determined via a combination of the incidence rate in the local area and a qualitative assessment by CERN.



Weekly virus circulation in local area
 (a) Qualitative assessment
 Based on number of confirmed cases at CERN, presence of new variants, vaccination, stratified testing campaign, etc.

Level	Weekly virus circulation in local area
4	High Over 100 cases per 100 000
3	Medium Over 10-25 cases per 100 000
2	Low Fewer than 10-25 cases per 100 000
1	Negligible

Telework (TW) measures*

Level	Telework (TW) measures*
4	Members of personnel (MP) who can telework should telework, though one day per week on-site is possible.
3	MP who can telework should telework, though two days per week on-site are possible.
2	Normal working conditions apply. Telework may be exceptionally requested by the Organization.
1	Normal working conditions apply.

Access to CERN sites**

Level	Access to CERN sites**
4	MP and honorary members are authorised, only for professional reasons and in consultation with their supervisors
3	Retirees can access on-site facilities, such as bank safe deposit boxes, the CHIS office or the pension fund, only if strictly necessary
2	Relatives of CERN Members of Personnel are not authorised
1	CERN club members are not authorised

CERN clubs

Level	CERN clubs
4	Club activities outside CERN: Host State regulations apply
3	Club activities outside CERN: Host State regulations apply
2	Club activities outside CERN: Host State regulations apply
1	Club activities outside CERN: Host State regulations apply

Microcosm exhibition, CERN shop, Globe events

Level	Microcosm exhibition, CERN shop, Globe events
4	Resume with measures similar to those valid in Geneva museums, shops and theatres, and following HSE-approved protocols
3	Resume with measures similar to those valid in Geneva museums, shops and theatres, and following HSE-approved protocols
2	Resume with measures similar to those valid in Geneva museums, shops and theatres, and following HSE-approved protocols
1	Resume with measures similar to those valid in Geneva museums, shops and theatres, and following HSE-approved protocols

Public on-site events within the fenced area

Level	Public on-site events within the fenced area
4	Not allowed
3	Allowed with measures similar to those in Geneva public events and within CERN access measures
2	Allowed with measures similar to those in Geneva public events and within CERN access measures
1	Allowed with measures similar to those in Geneva public events and within CERN access measures

* 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

Measure	Level 4 (Red)	Level 3 (Orange)	Level 2 (Yellow)	Level 1 (Green)
Telework (TW) measures*	Members of personnel (MP) who can telework should telework, though one day per week on-site is possible.	MP who can telework should telework, though two days per week on-site are possible.	Normal working conditions apply. Telework may be exceptionally requested by the Organization.	Normal working conditions apply.
Access to CERN sites**	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
CERN clubs	Club activities outside CERN: Host State regulations apply	Club activities outside CERN: Host State regulations apply	Club activities outside CERN: Host State regulations apply	Club activities outside CERN: Host State regulations apply
Public on-site events within the fenced area	Not allowed	Allowed with measures similar to those in Geneva public events and within CERN access measures	Allowed with measures similar to those in Geneva public events and within CERN access measures	Allowed with measures similar to those in Geneva public events and within CERN access measures

Masks and proximeters mandatory.
Remote meetings still favoured.

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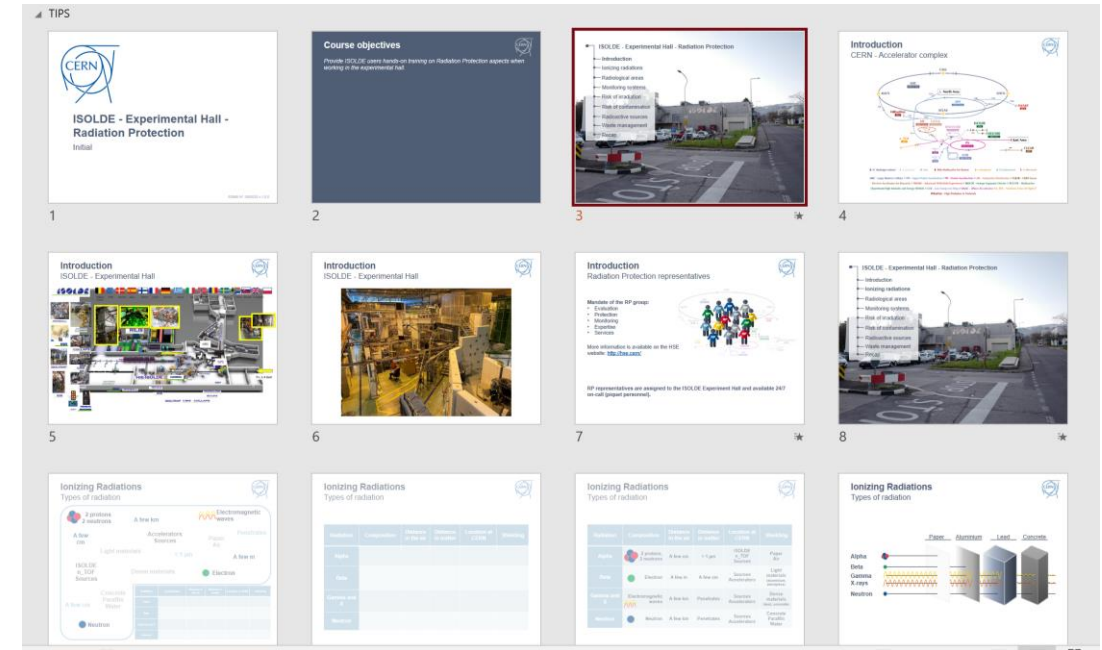
Please note

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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:
 - 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 take it when possible.

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



In LMS:
ISOLDE - Experimental Hall - Radiation Protection - Handling (Covid-19)

Electrical Safety - Working in EP experiments

- A lot of new local representatives e.g. VITO, WISARD, Miniball etc. Some required training e.g. crane/cryo courses are 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.