

Run25 schedule

Hi All,

The repair of the short in the blue ring is proceeding, with May 20th being the earliest the ring will be cold. We will reduce the week of May 13 - May 20th to 2-person shifts. If the repair stays on track, the following weeks will need to stay at 4 person shifts.

Additionally, folks who signed up for summer shifts should plan to attend their shifts. While the schedule is still uncertain due to the budget, it is highly likely that some (and possibly all) of the summer shutdown will be devoted to the RHIC run.

Regards,
Rosi

News from C-AD and preparation for Run 25:

The RHIC bus short repair is progressing well. However, after a power dip late last week that shut down the cryogenic system for several minutes, electrical tests in both the blue and yellow rings failed. This seems unrelated to the original blue short and is likely caused by moisture; drying of the leads took place over the weekend and hi-potting will be performed this morning. As a precaution, welding the blue cryostats will be delayed until all issues are resolved. The updated schedule has RHIC fully cold on May 25th. BLIP and NSRL operations continue.

Abhay also added:

→ We will have the first collisions on May 27-28

We still don't know the precise numbers for FY25 budgets. We are operating RHIC with last year's guidance, until DOE tells us more precise numbers. In the meanwhile, President's FY26 budget released over the weekend suggests a ~10% cut for the Office of Science, we do not know what it means for HEP and NP. Further, it is only the President's Budget. Both The House and Senate will need to agree before we have an FY26 budget.

Best
Megan and Jin

BNL Travel

	Month	Apr				May				Jun				Jul				Aug				Sep				Oct				Nov				Dec						
	Period	4/1 4/7	4/8 4/14	4/15 4/21	4/22 4/28	4/29 5/5	5/6 5/12	5/13 5/19	5/20 5/26	5/27 6/2	6/3 6/9	6/10 6/16	6/17 6/23	6/24 6/30	7/1 7/7	7/8 7/14	7/15 7/21	7/22 7/28	7/29 8/4	8/5 8/11	8/12 8/18	8/19 8/25	8/26 9/1	9/2 9/8	9/9 9/15	9/16 9/22	9/23 9/29	9/30 10/6	10/7 10/13	10/14 10/20	10/21 10/27	10/28 11/3	11/4 11/10	11/11 11/17	11/18 11/24	11/25 12/1	12/2 12/8	12/9 12/15	12/16 12/22	12/23 12/29
		Cryo Week	2	3	4	5	6	7	8	9	10	11	12	13	14	Summer Break				15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32			
	Events	QM			PostQM			HQ RHIC		MSC				CM										IS	JPS	SPIN														
	Beam	eam												7/1	No Beam				8/18	Beam (8/19--)																				12/22
BNL	Rachid	QM																																						
BNL	Raul																																							
Purdue	Wei																																							
Purdue	Joseph		4/10																																					
RIKEN	Yasuyuki		4/13			4/29																																		
RIKEN	Itaru	4/7			4/24		5/12			5/29		6/17			7/22										IS	JPS														
RIKEN	Genki	4/2										6/18														JPS	SPIN													
RIKEN	Akitomo					5/9				5/29		6/18		7/3																										
RIKEN	Yuko	QM				5/11					6/5														IS	JPS														
RIKEN/NCU	Cheng-Wei	QM													7/8						8/25				IS?	JPS?														
NWU	Takashi		4/16					5/21		?																														
NWU	Maya	Mostly not available																																						
NWU	Nao																																							
NWU	Yui																																							
NWU	Mahiro		4/16											7/3																										
NWU	Itsuka					5/12									7/17																									
Rikkyo	Takahiro	4/7									6/18																													
Rikkyo	Tomoki																																							
JAEA	Shoichi																																							
NCU	Chia-Ming																																							
NCU	Kai-Yu																																							
NCU	Wei-Che																																							
NCU	Shan-Yu																																							
Korea Univ	Byungsik																																							
Korea Univ	Jaein	QM	4/16											7/3					7/31 ~ Army KR													</								

<https://docs.google.com/spreadsheets/d/19mHncED6ORXqv2N4TVZ12kvGjgqf92Ysr8i0v4nPBM/edit?gid=177969834#gid=177969834>

Shift

- Full 4-person shift will be starting on May 20
- Most likely no summer break for July 1 – Aug 18 (but it's still depending on the FY2025 budget)
 - Start organizing our shift trading market, and arrange for your summer travel

	Month	Apr				May				Jun				Jul				Aug				Sep				Oct				Nov				Dec						
	Period	4/1 4/7	4/8 4/14	4/15 4/21	4/22 4/28	4/29 5/5	5/6 5/12	5/13 5/19	5/20 5/26	5/27 6/2	6/3 6/9	6/10 6/16	6/17 6/23	6/24 6/30	7/1 7/7	7/8 7/14	7/15 7/21	7/22 7/28	7/29 8/4	8/5 8/11	8/12 8/18	8/19 8/25	8/26 9/1	9/2 9/8	9/9 9/15	9/16 9/22	9/23 9/29	9/30 10/6	10/7 10/13	10/14 10/20	10/21 10/27	10/28 11/3	11/4 11/10	11/11 11/17	11/18 11/24	11/25 12/1	12/2 12/8	12/9 12/15	12/16 12/22	12/23 12/29
	Cryo Week	2	3	4	5	6	7	8	9	10	11	12	13	14	Summer Break				15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32				
Shift available	Owl / SL																																							
	Owl / DAQ																																							
	Owl / DM																																							
	Owl / DO																																							
	Day / SL																																							
	Day / DAQ																																							
	Day / DM																																							
	Day / DO																																							
	Eve / SL																																							
	Eve / DAQ																																							
	Eve / DM																																							
Eve / DO																																								

<https://docs.google.com/spreadsheets/d/19mHncED6ORXqv2N4TVZ12kvGjggf92Ysrr8i0v4nPBM/edit?gid=177969834#gid=177969834>

INTT experts (and primary contact)

- “INTT expert” can be any INTT member who attend and report at SCM for the INTT status
 - Better to be at 1008 as much as possible
- “Primary contacts” supposed to make the instantaneous decision for the operation modes and conditions or to recover from issues and troubles.

INTT *primary contact(s)	<i>* Genki Nukazuka</i>	631-816-3268
	----- <i>In case detector/cooling problems, Call Rachid</i>	631-652-5042

<https://docs.google.com/document/d/1uNfK3AQ9zsTE96cCneUHJSVMRqKb4RZ00WFcWpKh4hM/edit?tab=t.0>

INTT *primary Contact	*Rachid Nouicer (at BNL)	631-652-5042	Maya Shimomura (BNL)	631-504-2144
	Genki Nukazuka (at BNL)	631-816-3268	Takashi Hachiya (BNL)	631-
	Itaru Nakagawa (at BNL)	934-226-8549	Cheng-Wei Shih (BNL)	631-
	Akitomo Enokizono (at BNL)	934-226-7791		
	Joseph Bertaux (at BNL)	317-385-3985		
	Jaien Hwang (at BNL)	903-819-4585		

https://wiki.sphenix.bnl.gov/images/5/5a/20240919_ExpertShift.pdf

“INTT expert sign up page”

2/18 – 2/25	Rachid Nouicer (631-652-5042)
2/25 – 3/4	Rachid Nouicer (631-652-5042)
3/4 – 3/11	Akitomo Enokizono (934-226-7791)
3/11 – 3/18	Akitomo Enokizono (934-226-7791)
3/18 – 3/25	Yuko Sekiguchi (631-578-2029)
3/25 – 4/1	Yuko Sekiguchi & Joseph Bertaux (317-385-3985)
4/1 – 4/8	Joseph Bertaux (317-385-3985)
4/8 – 4/15	Genki Nukazuka (631-816-3268)
4/15 – 4/22	Genki Nukazuka (631-816-3268)
4/22 – 4/29	Ryotaro Koike (631-578-2029)
4/29 – 5/6	Takashi Hachiya (631-578-2029)
5/6 – 5/13	Genki Nukazuka (631-816-3268)
5/13 – 5/20	Jaein Hwang (631-578-2029)
5/20 – 5/27	Mahiro Ikemoto (631-578-2029)
5/27 – 6/3	Yuko Sekiguchi (631-578-2029)
6/3 – 6/10	Ryotaro Koike (631-578-2029)
6/10 – 6/17	Takahiro Kikuchi (631-578-2029)
6/17 – 6/24	Akitomo Enokizono (934-226-7791)
6/24 – 7/1	Akitomo Enokizono (934-226-7791)
7/1 – 7/8	

https://docs.google.com/spreadsheets/d/1fScElAkR3y6s6T2XGG_EIEAp8q-i80elzFMKECRtIEk/edit?gid=0#gid=0

INTT status

- Hot chips have been masked at Felix
- GL1-INTT mismatch problem was fixed
 - It is due to BCO “leftover” at the beginning of run
 - But still a little bit issue on the cosmic trigger?
- Dry run is ongoing
 - Genki will make DST data on Monday
- Sensitive chiller alarm will be fixed on Monday

4月29日

Genki Nukazuka: @all (especially @Rachid Nouicer) After discussing with some people including @Raul Cecato , I decided to active the FELIX-level hot channel mask to see whether the GL1-INTT matching condition gets better. @Raul Cecato will apply the same masks as last year around 6pm today. See [Elog](#) or the table below for the detailed info:

server	felix channel	onlmon chip id	felix chip id
intt0	6	6	33
intt0	6	8	35
intt1	2	14	15
intt1	2	16	17
intt2	1	7	8
intt4	8	?	17
intt4	11	?	13
intt6	10	11	12
intt6	12	18	19

Run25 commissioning to do list

Task	Duration	Points	Beam condition	Other subsystem condition	Priority	Field	Trigger	Comment
Chip saturation study	10 mins for each	INTT in trigger mode Different open time 25, 40, 60, 80, 90, 110, 127 moderate ncollision, 2, 50, 100 If possible we need the long GTM busy window for this test	with collisions (with low rate)	With MBD, in global mode	High		MBD	This is to study the chip hit saturation issue discovered on Dec 10 2024. Whether we still see the cutoff in the chip nhit distribution even with the open time of 128 BCO? We also need to check the cluster phi size distribution We can also try to learn the correlation between the open_time and nhits
Carried over hit study	30 mins	INTT in trigger mode moderate open_time (80 or 128) ncollision 1 or 2 or 3 Short GTM busy window for this test	with collisions (with high rate)	With MBD, in global mode	High		MBD	As of Nov 25 2024, I think we never have the dataset with very narrow ncollision for the event-mixed-up study With the statistic approach, in the reality, we just cannot distinguish b/w mix-up hits and the hits from real collisions. So it's good to have such a dataset that we have the potential to believe that any abnormal behavior found in the data can be really came from anything other than the really collisions. In addition, by comparing with the previous dataset with ncollision 100, we can possibly learn where the event mixup happened.
Timing coarse delay scan	5 min x 6 points x 2 sets	lv1 = 112, 113, 114, 115, 116, 117	With collisions	With MBD, standalone	High	Any	MBD	After GTM is finalized
Single bunch crossing	10 mins?	one run ncollision 100 one run small ncollision	single or two bunch crossing(s) with collisions	Join the MVTX commissioning	Low			We never join the MVTX commissioning data taking. I think it's a good idea to take at least one run with single bunch crossing or five. We can learn the noise level and also the beam background, and also fraction of the hit moved to the next bin
DAC0 scan	5 min x 6 points x 2 sets	DAC0 = 15, 20, 25, 30, 35, 40	better to be with beam	Standalone	Middle	Any	MBD	Better to take data in the same condition as Run2024 Au+Au commissioning, i.e. with Au+Au beam, with other subsystems on.
Digital control test?	5 min x 2 points x 2 sets	Digital Ctrl = 2, 10	With collisions	Standalone	High	Any	Any	First try the digital control test with pedestal data with no collisions. If it's not successful, retry to take data with collisions.
Renew chip/channel mask	1 min w/ FA	Need some iterations	With collisions	Standalone	Must	Any	Any	Can be finished before Au beam comes. This work will should be performed AFTER 1 week of stable data taking using the current mask condition. Also need Raul to unmask FELIX chip masking

https://docs.google.com/spreadsheets/d/175Z06nDFWACKIrvqN_R43ABltRfE6r23u9CZtVuwDHg/edit?gid=1538604329#gid=1538604329
(INTT wiki → Run2025 → commissioning task list)