INTT group general topics

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国際会議・学会

- Initial Stages 2025 (https://indico.cern.ch/event/1479384/)
  - 会期・会場：９月７日～１２日, 国立中央大学, 台湾
  - 講演申込期限：Closed
  - 学生補助申し込み期限：Clolsed

- 日本物理学会 第８０回年次大会
  - 会期・会場：９月１６日～１９日、広島大学・東広島キャンパス
  - 講演申込期限：７月３日、１４時

- 53rd International Symposium on Multiparticle Dynamics
  - 会期・会場：９月２１～２８日、 Mon Repos Palace, Corfu, Greece
  - 講演申込期限：６月３０日

- SPIN 2025
  - 会期・会場：９月２２日～２６日、Qingdao Haitian Hotel、中国・青島市
  - 講演申込期限：６月３０日

Initial Stages/物理学会 講演予定

- IS講演
  - 関口：Long-range two-particle correlation
  - 施　　：Bulk measurement of sPHENIX
  - 小池：INTT Run25コミッショニング全般
  - 菊池：INTT efficiency with MVTX
  - 大前：reaction plane with INTT
  - 原田：ハーフエントリー問題

- 学会講演（予定）
  - 糠塚：ジェットを用いた核子構造
  - 関口：Two-particle correlation and flow
  - 小池：INTT Run25コミッショニング全般
  - 池本：J/psi analysis

Commissioning list

Task	Person in Charge	Duration	Points	Beam condition	Other subsystem	Priority	Field	Trigger	Comment
Chip saturation study	DAQ: 1008 guys Analysis: Ryotaro Support: Cheng-Wei	10 mins for each	INTT in trigger mode Set1-1: ncollision100, and open_time 127 Set1-2: ncollision100, and open_time 110 Set1-3: ncollision100, and open_time 90 Set1-4: ncollision100, and open_time 80 Set1-5: ncollision100, and open_time 60 Set1-6: ncollision100, and open_time 40 Set1-7: ncollision100, and open_time 25 Set2: same open_time settings, while changing ncollision to be 2 Set3: same open_time settings, while changing ncollision to be 50	with collisions (with low rate)	With MBD, in global mode	High	Any	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	DAQ: 1008 guys Analysis: Ryotaro Support: Cheng-Wei	10-15 mins (~1M to 1.5M events for each)	INTT in trigger mode Set1: ncollision 3, and open_time 60 Set2: ncollision 3, and open_time 127 Set3: ncollision 127, and open_time 127 Set4: ncollision 100, and open_time 60 (nominal setting, as ref.) (Short GTM busy window for this test if possible, but maybe not possible)	with collisions (prefer high trigger rate)	Local mode should be fine	High	Any	MBDNS	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 abnomal 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	DAQ: 1008 guys Analysis: Ryotaro Support: Genki	5 min x 6 points x 2 sets	lvl1 = 112, 113, 114, 115, 116, 117	With collisions	With MBD, standalone	High	Any	MBD	After GTM is finalized
DAC0 scan	DAQ: 1008 guys Analysis: Nao Support: Akitomo	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	DAQ: Takahiro Analysis: Tomoki Support: Itaru	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	DAQ: 1008 guys Analysis: Jaein Support: Rachid/Raul	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
Single bunch crossing	DAQ: 1008 guys Analysis: ?? Support: ??	10 mins?	one run ncollision 100 one run small ncollision	single or two bunch crossing(s) with collisions	Join the MVTX commissioning	Low	Any	Any	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 live. We can learn the noise level and also the beam background, and also fraction of the hit moved to the next bin
Hit rate study with/without collar	DAQ: 1008 guys Analysis: ?? Support: ??	10 mins?	one run ncollision 100 one run for each configuration small ncollision	single or two bunch crossing(s) with collisions	Join the MVTX commissioning	Low	Any	Any	

Done (Chip saturation study)
Done (Carried over hit study)
Done (Timing coarse delay scan)
Done (DAC0 scan)
Done? (Digital control test)
Done (Renew chip/channel mask)

Commissioning runs

2025/06/20 20:11	68007	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	100	60	Trigger rate for MBD is quite high enough. Do 2mins data taking instead.(Clock trigger rate is low enough) Global Run Number 68006
2025/06/20 20:15	68008	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	127	127	Trigger rate for MBD is quite high enough. Do 2mins data taking instead.(Clock trigger rate is low enough) Global Run Number 68006
2025/06/20 20:20	68009	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	3	127	Trigger rate for MBD is quite high enough. Do 2mins data taking instead.(Clock trigger rate is low enough) Global Run Number 68006
2025/06/20 20:23	68010	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	3	60	Trigger rate for MBD is quite high enough. Do 2mins data taking instead.(Clock trigger rate is low enough) Global Run Number 68006
2025/06/20 20:28	68012	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	100	60	Trigger rate for MBD is quite high enough. Do 2mins data taking instead.(Clock trigger rate is low enough) Global Run Number 68011
2025/06/20 20:32	68013	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	127	127	Trigger rate for MBD is quite high enough. Do 2mins data taking instead.(Clock trigger rate is low enough) Global Run Number 68011
2025/06/20 20:35	68014	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	3	127	Trigger rate for MBD is quite high enough. Do 2mins data taking instead.(Clock trigger rate is low enough) Global Run Number 68011
2025/06/20 20:37	68015	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	3	60	Trigger rate for MBD is quite high enough. Do 2mins data taking instead.(Clock trigger rate is low enough) Global Run Number 68011
2025/06/20 20:42	68016	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	100	60	DigControl Test Map file (digcon_map_20250618.txt) Global Run Number 68011
2025/06/20 20:48	68017	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	100	60	DigControl Test Map file (digcon_map_20250618_another.txt) Global Run Number 68011
2025/06/20 20:54	68019	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	100	60	DigControl Test Map file (digcon_map_20250618.txt) Global Run Number 68018
2025/06/20 20:58	68020	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	100	60	DigControl Test Map file (digcon_map_20250618_another.txt) Global Run Number 68018
2025/06/20 21:00	68021	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	100	60	DigControl Test Map file (digcon_map_20250618_original.txt), here original means the digcon_map.txt file Global Run Number 68018
2025/06/20 21:05	68022	beam ▼	On ▼		2min	15kHz(MBC	All Felix	35	108	100	60	DigControl Test Map file (digcon_map_20250618_original.txt), here original means the digcon_map.txt file Global Run Number 68018

- We took special runs for hit carry-over and chip-by-chip digital control.
  - Private DST files (***_no_hot_special.root) have been processed
  - /sphenix/tg/tg01/commissioning/INTT/data/dst_files/2025/