

System Experts and Teams on-site at CERN

Coordination of presence and action items sequence being defined in the
Commissioning Plan & Procedures document ⊕ Run Plan & Shift Table

Commissioning Leader, Run Coordinator (F. Resnati/CERN, R. Acciarri/FNAL) + Deputy (A.Zani/CERN)

August 29, 2018 (Start)
November 11, 2018 (End)

ProtoDUNE-SP Beam Time Schedule

H4 Beam Time Allocation to NP04 by SPS-C:

7.5 weeks (including Beam Commissioning Time) in 4 blocks (2w + 2w + 2w + 1.5w)



schedule issue date: 26-Jan-2018

Version: 1.0

LHC Exp.
 PS/SPS Exp.
 Other Exp.
 INT Exp.

		Mar			Apr			Mai			Jun			Jul			Aug			Sep			Oct			Nov			Dec																																																																				
Week		11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50																																																								
Machine																									UA9 TS1 Coldex																								UA9 TS2 Coldex																								Coldex																								RP
North Area	T2 - H2	SPS & TT20 Setup 18			NA Setup 8	HERD FIT 7	NA62 GTK 7	NA61 SHINE 14			TIC 7			Calice (Ahalc) 7	ATLAS ZDC 7	Calice (Ahalc) 7	NA61 K 60GeV/c 7	NA61 SHINE 21			AXIAL 7	KLEVER 7	LEMMA 7	CMS HGCA 7	CMS HCAL 14		Calice (Sdhalc) 14		HERD 7	NA61 SHINE 7	CMS HGCA 7	NP02 26			NA61 SHINE 28																																																														
	T2 - H4	SPS & TT20 Setup 18			NA Setup 6	NA63 9	CMS ECAL 7	GIF RD51 14		NA64 setup 7	NA64 35			CMS ECAL 7	AIDA WP14 7	SHiP installation 7	SHiP Muon 14		SHiP Charm 7	GIF 7	GIF RD51 14		DsTau 7	NP04 setup 7	NP04 7	CMS MTD 7	NP04 14		CMS ECAL 7	NP04 14		GIF RD51 7	NP04 12	RE29 DAMPE 7	HERD 7	ATLAS ZDC 7	CaloCube 7																																																												
	T4 - H6	SPS & TT20 Setup 18			NA Setup 6	Clc pix 7	CMS Outer Tracker 9	ATLAS HGTD 7	ATLAS ITK 14		ATLAS ITK Kartel 7	RD42 7	ALICE muons 7	CERF 7	CMS Outer Tracker / AIDAwp7 7	Clc pix 7	ATLAS HGTD 7	ATLAS ITK 21		ATLAS AFP 14		ATLAS BCM 7	Clc pix 7	ATLAS ITK 14	ATLAS AFP 14	ALICE muons 7	RD42 7	AIDA WP7 7	ATLAS ITK Kartel 14		CMS Outer Tracker 7	ATLAS Strip Tk 7	Clc pix 5																																																																
	T4 - H8	SPS & TT20 Setup 18			NA Setup 6	TOTEM (+UA9) 9	ATLAS HV-CMOS 7	ATLAS HV-CMOS 14		LHCb 14	ATLAS Tilecal 14		ATLAS HV-CMOS 7	TOTEM (+UA9) 7	ATLAS TRT 7	LHCb 21		crysbear 7	CMS ITK 7	ALICE FOCAL 14		TOTEM (+UA9) 7	mu-e 7	ATLAS HV-CMOS 7	FCce 7	TOTEM (+UA9) 7	ATLAS HV-CMOS 7	CMS ITK 7	LHCb 26		ATLAS Tilecal 14		R2E (+UA9) 7	HNX 14		NUCLEON 7																																																													
	T4 - K12	SPS & TT20 Setup 18			NA Setup 6																								NA62 217																																																																				
	T6 - M2	SPS & TT20 Setup 18			NA Setup 6																								NA58 COMPASS 217																																																																				
TT41				AWAKE 21						AWAKE 21						AWAKE 21						AWAKE 21																																																																											

For further information contact the PS/SPS-Coordinator. Email: Sps.Coordinator@cern.ch, Tel: +41 75 411 3845.

SHIFT TABLE

Shift unit is TWO-Weeks

1 ... 39 = Shift unit ID NUMBER

Shift units are assigned/taken to/by Institutions (not by individuals)

Shifters (and their Institution) must be registered in the CERN Graybook

For first-visit-at-CERN shifters:

- Paperwork for CERN badge&access to be prepared well before
[Maxine-DUNE Secretariat & Simona-CENF Secretariat]
- Arrival at CERN at least 2-3 days before first shift

		AUGUST				SEPTEMBER				OCTOBER				NOVEMBER			
W#		34	35	36	37	38	39	40	41	42	43	44	45	46			
W		22 A 29 A	29 A 5 S	5 S 12 S	12 S 19 S	19 S 26 S	26 S 3 O	3 O 10 O	10 O 17 O	17 O 24 O	24 O 31 O	31 O 7 N	7 N 14 N				
D	h	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S	E.S. S		
We	16/24	1 4	6 7	9 10	12 13	15 16	18 19	21 22	24 25	27 28	30 31	33 34	36 37	39			
Th	00/08	2 5	4 8	7 11	10 14	13 17	16 20	19 23	22 26	25 29	28 32	31 35	34 38	37			
	08/16	3 6	5 9	8 12	11 15	14 18	17 21	20 24	23 27	26 30	29 33	32 36	35 39	38			
	16/24	3 6	5 9	8 12	11 15	14 18	17 21	20 24	23 27	26 30	29 33	32 36	35 39	38			
Fr	00/08	1 4	6 7	9 10	12 13	15 16	18 19	21 22	24 25	27 28	30 31	33 34	36 37	39			
	08/16	2 5	4 8	7 11	10 14	13 17	16 20	19 23	22 26	25 29	28 32	31 35	34 38	37			
	16/24	2 5	4 8	7 11	10 14	13 17	16 20	19 23	22 26	25 29	28 32	31 35	34 38	37			
Sa	00/08	3 6	5 9	8 12	11 15	14 18	17 21	20 24	23 27	26 30	29 33	32 36	35 39	38			
	08/16	1 4	6 7	9 10	12 13	15 16	18 19	21 22	24 25	27 28	30 31	33 34	36 37	39			
	16/24	1 4	6 7	9 10	12 13	15 16	18 19	21 22	24 25	27 28	30 31	33 34	36 37	39			
Su	00/08	2 5	4 8	7 11	10 14	13 17	16 20	19 23	22 26	25 29	28 32	31 35	34 38	37			
	08/16	3 6	5 9	8 12	11 15	14 18	17 21	20 24	23 27	26 30	29 33	32 36	35 39	38			
	16/24	3 6	5 9	8 12	11 15	14 18	17 21	20 24	23 27	26 30	29 33	32 36	35 39	38			
Mo	00/08	1 4	6 7	9 10	12 13	15 16	18 19	21 22	24 25	27 28	30 31	33 34	36 37	39			
	08/16	2 5	4 8	7 11	10 14	13 17	16 20	19 23	22 26	25 29	28 32	31 35	34 38	37			
	16/24	2 5	4 8	7 11	10 14	13 17	16 20	19 23	22 26	25 29	28 32	31 35	34 38	37			
Tu	00/08	3 6	5 9	8 12	11 15	14 18	17 21	20 24	23 27	26 30	29 33	32 36	35 39	38			
	08/16	1 4	6 7	9 10	12 13	15 16	18 19	21 22	24 25	27 28	30 31	33 34	36 37	39			
	16/24	1 4	6 7	9 10	12 13	15 16	18 19	21 22	24 25	27 28	30 31	33 34	36 37	39			
We	00/08	2 5	4 8	7 11	10 14	13 17	16 20	19 23	22 26	25 29	28 32	31 35	34 38	37			
	08/16	3 6	5 9	8 12	11 15	14 18	17 21	20 24	23 27	26 30	29 33	32 36	35 39	38			

The SHIFT TABLE is organized in COLUMNS.

Each Column represents ONE WEEK of shifts - there are 12 Weeks of shifts starting on Aug.22 and ending on Nov.14 (one additional week after Nov.14 is left as optional)

The Week starts on Wed. at 4pm (usually the Wed. morning is used by SPS for machine development, and there is no beam in the morning) and ends on the following Wednesday at 4pm

Each Week is thus made of SIX full DAYS + ONE DAY (Wed) split in two segments - Days are vertically displayed from top to bottom of the Week column.

Each Day of the Week is split into THREE PERIODS of 8 hrs each (vertically ordered)

Each Period has TWO SHIFTS (horizontally ordered - forming the width of the Column). Shifts are classified as E.S. (Expert Shift) and S (Shift)

Each Shift is represented by a “Pixel” in the shift table, identified by a Shift Unit **ID NUMBER**.

Each ID NUMBER identifies the Institution signing-up for the corresponding Shift Unit.

Each Id Number/Institution (with the exception of shift Id. 1, 2, 3 - reserved to Experts) is assigned with a Shift Unit, i.e. with a total of 14 Shifts Periods, distributed over TWO consecutive Weeks (7 S-type Shifts in the first Week and 7 ES-type shifts in the second week) indicated by the corresponding Id. Number.

The Institution supports their shifter(s) for travel expenses. The Project can supply for lodging (room in apartment near Preveessin).

Shift rotation logic aims to distribute an even number of owl and w.e. shifts to ALL Institutions:

shifts are either single 8hrs long (owl shift, over night from 0:00 to 8:00) or double 8+8 hrs long (during day, 8:00 to 24:00). This arrangement allows for ONE full day (24hrs) to relax between shifts.

See the highlighted “**Id 16**” as example of *shift/rest* period distribution.

Note: After the first week **Shifter** 16 becomes **Expert Shifter** in the second week.

Note 2: Institutions may send one or two shifters to cover their shift unit. In case of TWO, both shifters are required to stay the entire period of two weeks.

The Shift Table requires in total **39 Institutions** for the coverage of
12 Weeks x 7 Day/Week x 3 Periods/Day x 2 Shifter/Periods = 504 Pixels

Currently there are 43 Institution registered in the CERN Gray Book and several more active Institutions not (yet) registered.

Institutions	TeamLeader	SHIFT ID NUMBER	NON AVAILABLE FOR SHIFT
SLAC	M. Convery		
Michigan Stae U	C. Bromberg		
ANL	Z. Djurcic		
Louisiana State U	T. Kutter		
LBNL	C-J Lin		
Indiana U	S. Mufson		
Boston U	E. Kearns, F. Blaszczyk		
U of Chicago	E. Blucher		
U of Cincinnati	A. Aurisano		
Oregon State U	H. Schellman		
U of California Davis	R. Svoboda, J. Wang		
U of Hawaii	J. Maricic		
U of Huston	L. Whitehead, A. Renshaw		
U of Iowa	O. Yasar		
U of California Irvine	J. Biang		
Drexel U	C. Lane		
U of Rochester	S. Manly		
Stony Brook U	C-K. Jung		
BNL	S. Kettell, M. Worcester		
William&Mary	M. Kordosky		
Virginia Tech	C. Mariani		
U of California LosAngeles	H. Wang		
U of Wisconsin Madison	R. Paulos		
U of Minnesota	M. Marshak, W. Miller		
U of Dallas	W. Flanagan		
Kansas State U	G. Horton-Smith		
Yale U	B. Fleming, S. Tufanli		
FNAL	F. Cavanna, G. Rameika		

CERN	M. Nessi		
NIKHEF (NL)	P. DeJong		
IFIC-Valencia (Sp)	A. Cervera		
UNICAMP (Br)	E. Segreto		
UFABC (Br)	A. Machado		
U of Bristol	J. Brooke		
U of Oxford	G. Barr		
U of Birmingham	A. Watson		
U of Sheffield	C. Booth		
RAL	A. Weber		
U of Edinburgh	F. Muheim		
U of Liverpool	C. Touramanis		
U of Manchester	J. Evans		
U of Warwick	G. Barker		

Institutions (not registered in GrayBook)	Team Leader	SHIFT ID NUMBER	NON AVAILABLE FOR SHIFT
U of Prague (Cz)	J. Zalesak		
UAN (Colombia)	R. Gutierrez		
UPenn	J. Klein		
U of Cambridge			
Colorado State U	R. Wilson		
Florida State U	I. Furic		
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