

AD User schedules

2018 ADUC meeting.
H. Wilkens

DRAFT Injector Accelerator Schedule 2018
preliminary schedule for discussion

November 28, 2017
ver. 0.6

2018 Fixed Target physics

East Area, nToF: 32.5 weeks starting March 30th. (~2.2x10¹⁹ protons on target for nToF)

AD, Isolde, SPS proton FT: 31 weeks, starting April 9th.

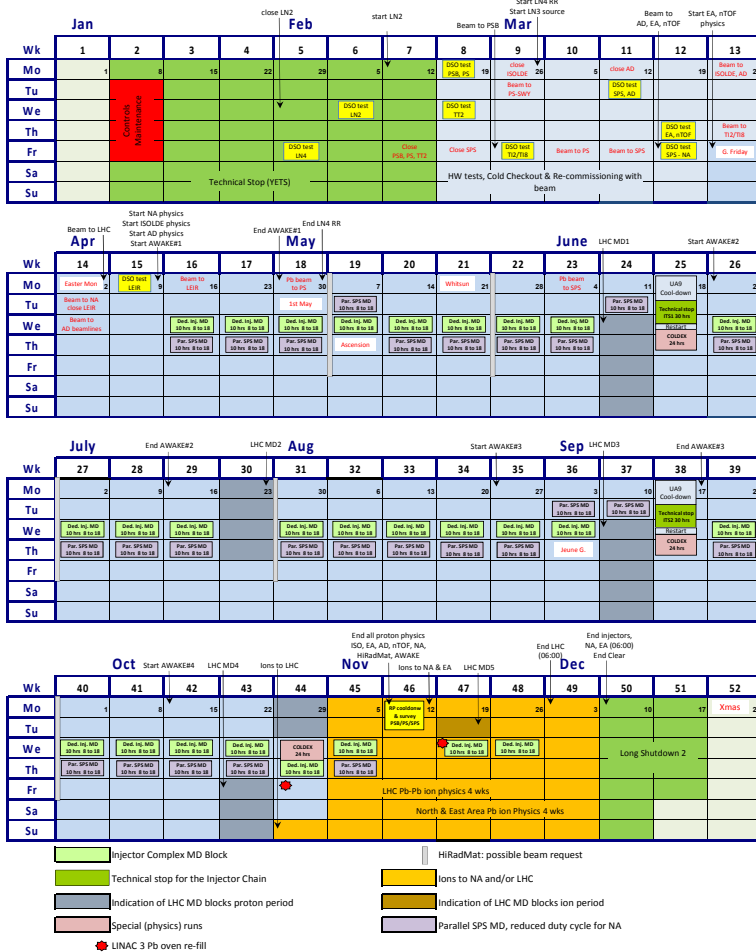
November 12th, stop of all proton beams (start LS2 works on the Linac-2 surface equipment & PSB power converter tests).

December 10th, stop of all beams (start of the SPS magnet tests)

SPSC recommended ions for NA61, after the end of availability of high intensity protons at SPS: 4 weeks Pb ion run.

Two scheduled Technical Stops (TS) to maintain the machine operating reliably. UA9 runs in the SPS machine during the radio-protection cooldown prior to the TS.

Large Machine Development (MD) program (Amorphous C-coating (COLDEX), crab-cavities, collimation, special beams, ions...) requires weekly dedicated MDs (Wednesdays) and parallel MDs (Thursdays), and 3 dedicated COLDEX runs.





AD User schedule

AD Schedule 2018 (Version 0.2 Jan. 15th, 2018)

Wk	Mon	Tue	Wed	Thu	Fri	Sat	Sun
12	AD / ELENA setting up						
13	AD / ELENA setting up						
14	AD / ELENA setting up						
15	MD	AD5 AD3	AD2 AD5 AD3	ELE AD5 AD3	AD2 AD5 AD3	ELE AD5 AD3	AD2 AD5 AD3
16	ELE	AD2 AD5	AD6 AD2 AD5	ELE AD2 AD5	AD6 AD2 AD5	ELE AD2 AD5	AD6 AD2 AD5
17	ELE	AD6 AD2	AD3 AD6 AD2	ELE AD6 AD2	AD3 AD6 AD2	ELE AD6 AD2	AD3 AD6 AD2
18	MD	AD3 AD6	AD5 AD3 AD6	ELE AD3 AD6	AD5 AD3 AD6	ELE AD3 AD6	AD5 AD3 AD6
19	ELE	AD5 AD3	AD2 AD5 AD3	ELE AD5 AD3	AD2 AD5 AD3	ELE AD5 AD3	AD2 AD5 AD3
20	ELE	AD2 AD5	AD6 AD2 AD5	ELE AD2 AD5	AD6 AD2 AD5	ELE AD2 AD5	AD6 AD2 AD5
21	MD	AD6 AD2	AD3 AD6 AD2	ELE AD6 AD2	AD3 AD6 AD2	ELE AD6 AD2	AD3 AD6 AD2
22	ELE	AD3 AD6	AD5 AD3 AD6	ELE AD3 AD6	AD5 AD3 AD6	ELE AD3 AD6	AD5 AD3 AD6
23	ELE	AD5 AD3	AD2 AD5 AD3	ELE AD5 AD3	AD2 AD5 AD3	ELE AD5 AD3	AD2 AD5 AD3
24	MD	AD2 AD5	AD6 AD2 AD5	ELE AD2 AD5	AD6 AD2 AD5	ELE AD2 AD5	AD6 AD2 AD5
25	ELE	AD6 AD2	AD3 AD6 AD2	ELE AD6 AD2	AD3 AD6 AD2	ELE AD6 AD2	AD3 AD6 AD2
26	ELE	AD3 AD6	AD5 AD3 AD6	ELE AD3 AD6	AD5 AD3 AD6	ELE AD3 AD6	AD5 AD3 AD6
27	MD	AD5 AD3	AD2 AD5 AD3	ELE AD5 AD3	AD2 AD5 AD3	ELE AD5 AD3	AD2 AD5 AD3
28	ELE	AD2 AD5	AD6 AD2 AD5	ELE AD2 AD5	AD6 AD2 AD5	ELE AD2 AD5	AD6 AD2 AD5
29	ELE	AD8 AD2	AD6 AD8 AD2	ELE AD8 AD2	AD6 AD8 AD2	ELE AD8 AD2	AD6 AD8 AD2
30	MD	AD6 AD8	AD3 AD6 AD8	ELE AD6 AD8	AD3 AD6 AD8	ELE AD6 AD8	AD3 AD6 AD8
31	AD7	AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6
32	AD5	AD7 AD3	AD5 AD7 AD3	AD5 AD7 AD3	AD5 AD7 AD3	AD5 AD7 AD3	AD5 AD7 AD3
33	MD	AD5 AD7	AD2 AD5 AD7	AD2 AD5 AD7	AD2 AD5 AD7	AD2 AD5 AD7	AD2 AD5 AD7
34	AD6	AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5
35	AD3	AD6 AD2	AD3 AD6 AD2	AD3 AD6 AD2	AD3 AD6 AD2	AD3 AD6 AD2	AD3 AD6 AD2
36	MD	AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6
37	AD8	AD7 AD3	AD8 AD7 AD3	AD8 AD7 AD3	AD8 AD7 AD3	AD8 AD7 AD3	AD8 AD7 AD3
38	AD5	AD8 AD7	AD5 AD8 AD7	AD5 AD8 AD7	AD5 AD8 AD7	AD5 AD8 AD7	AD5 AD8 AD7
39	MD	AD5 AD8	AD2 AD5 AD8	AD2 AD5 AD8	AD2 AD5 AD8	AD2 AD5 AD8	AD2 AD5 AD8
40	AD6	AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5
41	AD3	AD6 AD2	AD3 AD6 AD2	AD3 AD6 AD2	AD3 AD6 AD2	AD3 AD6 AD2	AD3 AD6 AD2
42	MD	AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6	AD7 AD3 AD6
43	AD5	AD7 AD3	AD5 AD7 AD3	AD5 AD7 AD3	AD5 AD7 AD3	AD5 AD7 AD3	AD5 AD7 AD3
44	AD2	AD5 AD7	AD2 AD5 AD7	AD2 AD5 AD7	AD2 AD5 AD7	AD2 AD5 AD7	AD2 AD5 AD7
45	AD6	AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5	AD6 AD2 AD5

AD physics stop November 11th 6AM.

Injector MD (8:00-18:00) every Wednesday

AD2 (ATRAP) AD5 (ALPHA) AD3 (ASACUSA) AD6 (AEGIS) AD7 (GBAR) AD8 (BASE)

AD operation starts April 9th.

AD Machine development every 3rd Monday 7:00 to 15:00.

42 shifts for ELENA commissioning (Mondays, Wednesdays and Fridays) up to end of July. Eventually p-bars to G-bar already then.

Then operation of ELENA+Gbar as an experiment in the shift rotation scheme. (61 shifts)

BASE, setup with beam 3 weeks in July and September. Priority for refilling the trap on night shifts (Monday to Wednesdays)

Shifts statistics:
 ATRAP 21.0%, ASACUSA 20.2%, ALPHA 21.9%, AEGIS 20.2%,
 Gbar 12.9%, BASE 6.5%

Constraints: ATRAP cannot run after ALPHA (to ramp the magnet), preferably no AEGIS after ALPHA.

ELENA team would like to continue with commissioning after the start of the G-bar experiment: SPS-C emphasis the need for physics beam time for all experiments, ELENA commissioning should be done during G-bar shifts.



backup

BUILDING THE 2018 SCHEDULE

AD MD and ELENA Commissioning till end of July



Wk	Mon	Tue	Wed	Thu	Fri	Sat	Sun
12	AD / ELENA setting up						
13	AD / ELENA setting up						
14	07-14	15-21	23-01				
Apr 02 - Apr 08	MD		ELE		ELE		
Apr 09 - Apr 15	ELE		ELE		ELE		
Apr 16 - Apr 22	ELE		ELE		ELE		
Apr 23 - Apr 29	MD		ELE		ELE		
Apr 30 - May 06	ELE		ELE		ELE		
May 07 - May 13	ELE		ELE		ELE		
May 14 - May 20	MD		ELE		ELE		
May 21 - May 27	ELE		ELE		ELE		
May 28 - Jun 03	ELE		ELE		ELE		
Jun 04 - Jun 10	MD		ELE		ELE		
Jun 11 - Jun 17	ELE		ELE		ELE		
Jun 18 - Jun 24	ELE		ELE		ELE		
Jun 25 - Jul 01	MD		ELE		ELE		
Jul 02 - Jul 08	ELE		ELE		ELE		
Jul 09 - Jul 15	ELE		ELE		ELE		
Jul 16 - Jul 22	MD		ELE		ELE		
Jul 23 - Jul 29			ELE		ELE		
Jul 30 - Aug 05							
Aug 06 - Aug 12	MD						
Aug 13 - Aug 19							
Aug 20 - Aug 26							
Aug 27 - Sep 02							
Sep 03 - Sep 09	MD						
Sep 10 - Sep 16							
Sep 17 - Sep 23							
Sep 24 - Sep 30	MD						
Oct 01 - Oct 07							
Oct 08 - Oct 14							
Oct 15 - Oct 21	MD						
Oct 22 - Oct 28							
Oct 29 - Nov 04							
Nov 05 - Nov 11							

AD physics stop November 11th 6AM.

Base runs in July and September

Wk	Mon	Tue	Wed	Thu	Fri	Sat	Sun
12	AD / ELENA setting up						
13	AD / ELENA setting up						
14	07-14	15-21	23-01				
Apr 02 - Apr 08	MD		ELE		ELE		
Apr 09 - Apr 15	ELE		ELE		ELE		
Apr 16 - Apr 22	ELE		ELE		ELE		
Apr 23 - Apr 29	MD		ELE		ELE		
Apr 30 - May 06	ELE		ELE		ELE		
May 07 - May 13	ELE		ELE		ELE		
May 14 - May 20	ELE		ELE		ELE		
May 21 - May 27	MD		ELE		ELE		
May 28 - Jun 03	ELE		ELE		ELE		
Jun 04 - Jun 10	ELE		ELE		ELE		
Jun 11 - Jun 17	MD		ELE		ELE		
Jun 18 - Jun 24	ELE		ELE		ELE		
Jun 25 - Jul 01	ELE		ELE		ELE		
Jul 02 - Jul 08	MD		ELE		ELE		
Jul 09 - Jul 15	ELE	AD8	ELE	AD8	ELE	AD8	AD8
Jul 16 - Jul 22	ELE AD8	AD8	ELE AD8	AD8	ELE AD8	AD8	AD8
Jul 23 - Jul 29	MD	AD8	AD8	ELE	AD8	AD8	AD8
Jul 30 - Aug 05							
Aug 06 - Aug 12							
Aug 13 - Aug 19	MD						
Aug 20 - Aug 26							
Aug 27 - Sep 02							
Sep 03 - Sep 09	MD						
Sep 10 - Sep 16	AD8	AD8	AD8	AD8	AD8	AD8	AD8
Sep 17 - Sep 23	AD8	AD8	AD8	AD8	AD8	AD8	AD8
Sep 24 - Sep 30	MD	AD8	AD8	AD8	AD8	AD8	AD8
Oct 01 - Oct 07							
Oct 08 - Oct 14							
Oct 15 - Oct 21	MD						
Oct 22 - Oct 28							
Oct 29 - Nov 04							
Nov 05 - Nov 11							

AD physics stop November 11th 6AM.

Gbar run after end of ELENA commissioning



Wk	Mon	Tue	Wed	Thu	Fri	Sat	Sun
12	AD / ELENA setting up						
13	AD / ELENA setting up						
14	07-14	15-21	23-01				
Apr 02 - Apr 08	MD		ELE		ELE		
Apr 09 - Apr 15	ELE		ELE		ELE		
Apr 16 - Apr 22	ELE		ELE		ELE		
Apr 23 - Apr 29	MD		ELE		ELE		
Apr 30 - May 06	ELE		ELE		ELE		
May 07 - May 13	ELE		ELE		ELE		
May 14 - May 20	MD		ELE		ELE		
May 21 - May 27	ELE		ELE		ELE		
May 28 - Jun 03	ELE		ELE		ELE		
Jun 04 - Jun 10	MD		ELE		ELE		
Jun 11 - Jun 17	ELE		ELE		ELE		
Jun 18 - Jun 24	ELE		ELE		ELE		
Jun 25 - Jul 01	MD		ELE		ELE		
Jul 02 - Jul 08	ELE		ELE		ELE		
Jul 09 - Jul 15	ELE	AD8	ELE	AD8	ELE	AD8	AD8
Jul 16 - Jul 22	ELE AD8	AD8	ELE AD8	AD8	ELE AD8	AD8	AD8
Jul 23 - Jul 29	MD	AD8	AD8	ELE	AD8	AD8	AD8
Jul 30 - Aug 05	AD7	AD7	AD7	AD7	AD7	AD7	AD7
Aug 06 - Aug 12	AD7	AD7	AD7	AD7	AD7	AD7	AD7
Aug 13 - Aug 19	MD	AD7	AD7	AD7	AD7	AD7	AD7
Aug 20 - Aug 26							
Aug 27 - Sep 02							
Sep 03 - Sep 09	MD	AD7	AD7	AD7	AD7	AD7	AD7
Sep 10 - Sep 16	AD8 AD7	AD8 AD7	AD8 AD7	AD8 AD7	AD8 AD7	AD8 AD7	AD8 AD7
Sep 17 - Sep 23	AD8 AD7	AD8 AD7	AD8 AD7	AD8 AD7	AD8 AD7	AD8 AD7	AD8 AD7
Sep 24 - Sep 30	MD	AD8	AD8	AD8	AD8	AD8	AD8
Oct 01 - Oct 07							
Oct 08 - Oct 14							
Oct 15 - Oct 21	MD	AD7	AD7	AD7	AD7	AD7	AD7
Oct 22 - Oct 28	AD7	AD7	AD7	AD7	AD7	AD7	AD7
Oct 29 - Nov 04	AD7	AD7	AD7	AD7	AD7	AD7	AD7
Nov 05 - Nov 11							

AD physics stop November 11th 6AM.

Fair shift rotation among the remaining 4 experiments



Wk	Mon	Tue	Wed	Thu	Fri	Sat	Sun
12	AD / ELENA setting up						
13	AD / ELENA setting up						
14	AD / ELENA setting up						
15	MD	BBB AAA	CCC BBB AAA	ELE BBB AAA	CCC BBB AAA	ELE BBB AAA	CCC BBB AAA
16	ELE	CCC BBB	DDD CCC BBB	ELE CCC BBB	DDD CCC BBB	ELE CCC BBB	DDD CCC BBB
17	ELE	DDD CCC	AAA DDD CCC	ELE DDD CCC	AAA DDD CCC	ELE DDD CCC	AAA DDD CCC
18	MD	AAA DDD	BBB AAA DDD	ELE AAA DDD	BBB AAA DDD	ELE AAA DDD	BBB AAA DDD
19	ELE	BBB AAA	CCC BBB AAA	ELE BBB AAA	CCC BBB AAA	ELE BBB AAA	CCC BBB AAA
20	ELE	CCC BBB	DDD CCC BBB	ELE CCC BBB	DDD CCC BBB	ELE CCC BBB	DDD CCC BBB
21	MD	DDD CCC	AAA DDD CCC	ELE DDD CCC	AAA DDD CCC	ELE DDD CCC	AAA DDD CCC
22	ELE	AAA DDD	BBB AAA DDD	ELE AAA DDD	BBB AAA DDD	ELE AAA DDD	BBB AAA DDD
23	ELE	BBB AAA	CCC BBB AAA	ELE BBB AAA	CCC BBB AAA	ELE BBB AAA	CCC BBB AAA
24	MD	CCC BBB	DDD CCC BBB	ELE CCC BBB	DDD CCC BBB	ELE CCC BBB	DDD CCC BBB
25	ELE	DDD CCC	AAA DDD CCC	ELE DDD CCC	AAA DDD CCC	ELE DDD CCC	AAA DDD CCC
26	ELE	AAA DDD	BBB AAA DDD	ELE AAA DDD	BBB AAA DDD	ELE AAA DDD	BBB AAA DDD
27	MD	BBB AAA	CCC BBB AAA	ELE BBB AAA	CCC BBB AAA	ELE BBB AAA	CCC BBB AAA
28	ELE	CCC BBB	AD8 CCC BBB	ELE CCC BBB	AD8 CCC BBB	ELE CCC BBB	AD8 CCC BBB
29	ELE	AD8 CCC	DDD AD8 CCC	ELE AD8 CCC	DDD AD8 CCC	ELE AD8 CCC	DDD AD8 CCC
30	MD	DDD AD8	AAA DDD AD8	ELE DDD AD8	AAA DDD AD8	ELE DDD AD8	AAA DDD AD8
31	AD7	AAA DDD	AD7 AAA DDD	AD7 AAA DDD	AD7 AAA DDD	AD7 AAA DDD	AD7 AAA DDD
32	BBB	AD7 AAA	BBB AD7 AAA	BBB AD7 AAA	BBB AD7 AAA	BBB AD7 AAA	BBB AD7 AAA
33	MD	BBB AD7	CCC BBB AD7	CCC BBB AD7	CCC BBB AD7	CCC BBB AD7	CCC BBB AD7
34	DDD	CCC BBB	DDD CCC BBB	DDD CCC BBB	DDD CCC BBB	DDD CCC BBB	DDD CCC BBB
35	AAA	DDD CCC	AAA DDD CCC	AAA DDD CCC	AAA DDD CCC	AAA DDD CCC	AAA DDD CCC
36	MD	AAA DDD	AD7 AAA DDD	AD7 AAA DDD	AD7 AAA DDD	AD7 AAA DDD	AD7 AAA DDD
37	AD8	AD7 AAA	AD8 AD7 AAA	AD8 AD7 AAA	AD8 AD7 AAA	AD8 AD7 AAA	AD8 AD7 AAA
38	BBB	AD8 AD7	BBB AD8 AD7	BBB AD8 AD7	BBB AD8 AD7	BBB AD8 AD7	BBB AD8 AD7
39	MD	BBB AD8	CCC BBB AD8	CCC BBB AD8	CCC BBB AD8	CCC BBB AD8	CCC BBB AD8
40	DDD	CCC BBB	DDD CCC BBB	DDD CCC BBB	DDD CCC BBB	DDD CCC BBB	DDD CCC BBB
41	AAA	DDD CCC	AAA DDD CCC	AAA DDD CCC	AAA DDD CCC	AAA DDD CCC	AAA DDD CCC
42	MD	AAA DDD	AD7 AAA DDD	AD7 AAA DDD	AD7 AAA DDD	AD7 AAA DDD	AD7 AAA DDD
43	BBB	AD7 AAA	BBB AD7 AAA	BBB AD7 AAA	BBB AD7 AAA	BBB AD7 AAA	BBB AD7 AAA
44	CCC	BBB AD7	CCC BBB AD7	CCC BBB AD7	CCC BBB AD7	CCC BBB AD7	CCC BBB AD7
45	DDD	CCC BBB	DDD CCC BBB	DDD CCC BBB	DDD CCC BBB	DDD CCC BBB	DDD CCC BBB

AD physics stop November 11th 6AM.