

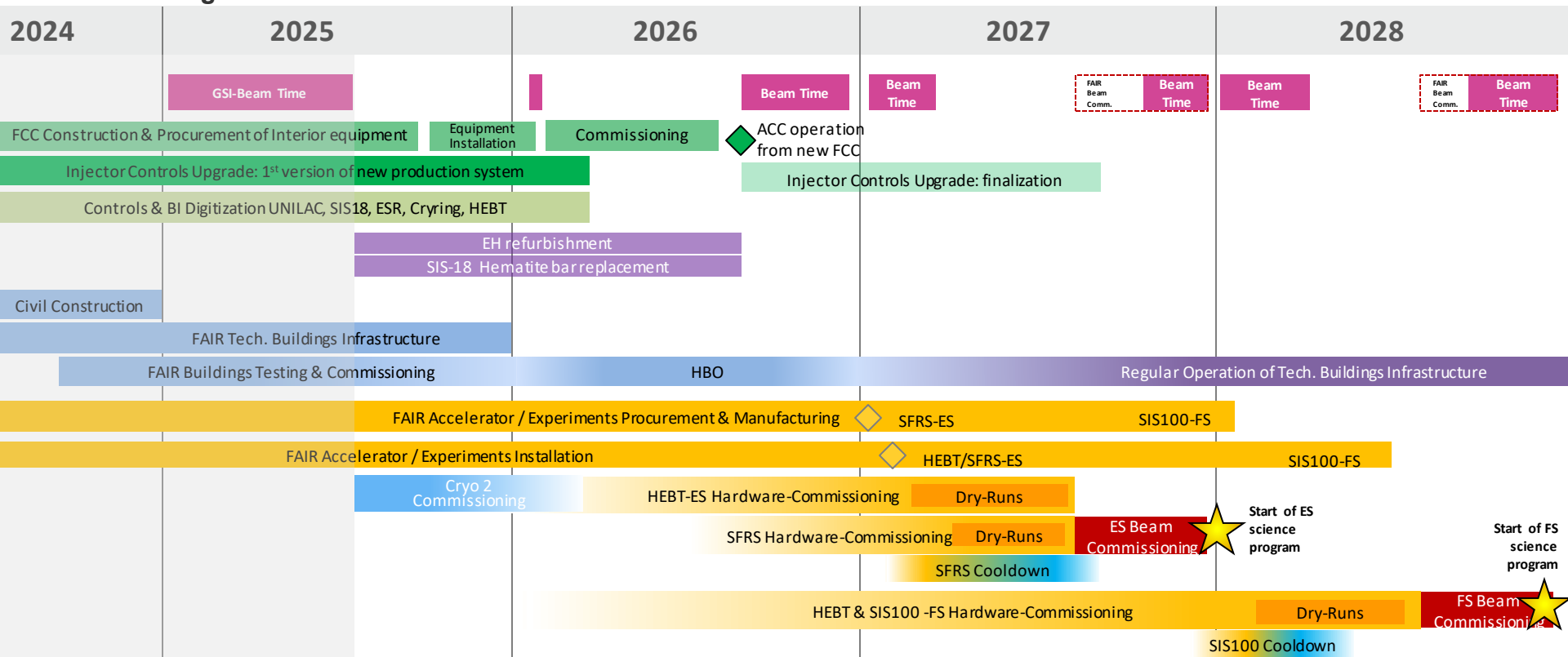
Beamtime coordinator report

Daniel Severin

NUSTAR week
September 30, 2025

„Reorganisation” of beam times to enable a strategic reorientation towards full operation

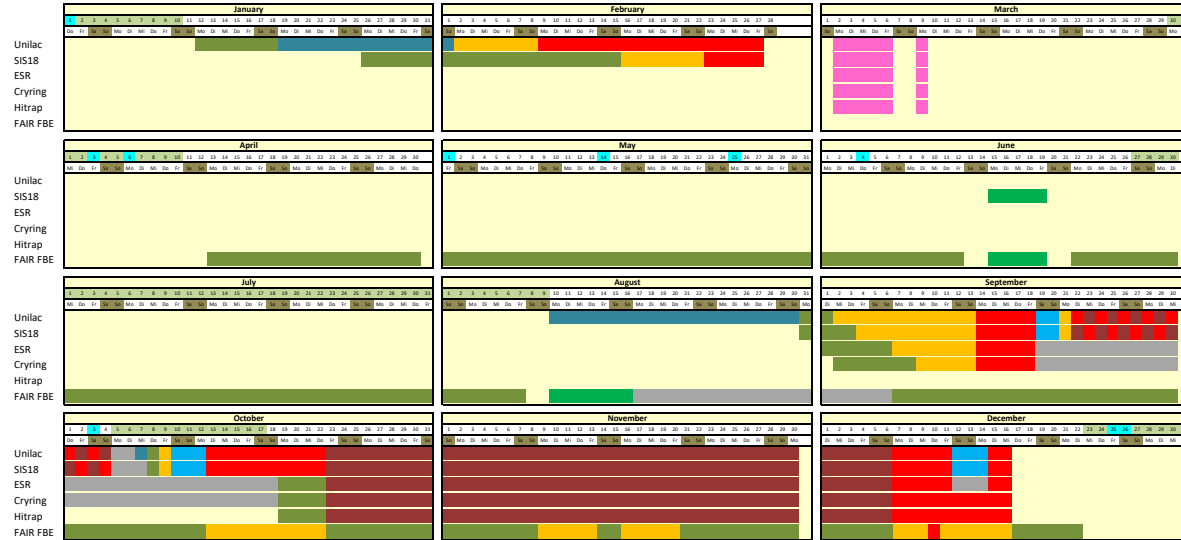
FAIR & GSI Integrated Schedule



General Plan of Accelerator Operations 2026

DRAFT 28.03.2025

GSI



Legend

	Bake Out
	Dry-Run
	Commissioning without Beam
	Beam Commissioning
	Physics Run
	Engineering Run / Machine Studies
	LINAC-RF commissioning
	\$88 radiation safety check
	Beam Setup
	Physics Run Crying standalone
	Operator Training
	Maintenance break

User Beamtime

	Days	Shifts
Unilac	51	153
SIS18	52	156
ESR	45	135
Crying	45	135
Hitrap	45	135

HKR besetzt 179

Information

- beam test in February is exclusively scheduled for injector control project
- engineering run in September for extensive testing of beam setup and operation from FCC
- a subset of physics experiments can eventually be scheduled in parallel for best effort operation
- machine blocks in October and December are dedicated to FAIR beam & detector tests
- Technical Stop (FAIR) in Aug./Sept. is dedicated to survey and alignment of SIS18-T151

FAIR
Phase 0
Research Program

General Plan of Accelerator Operations 2027

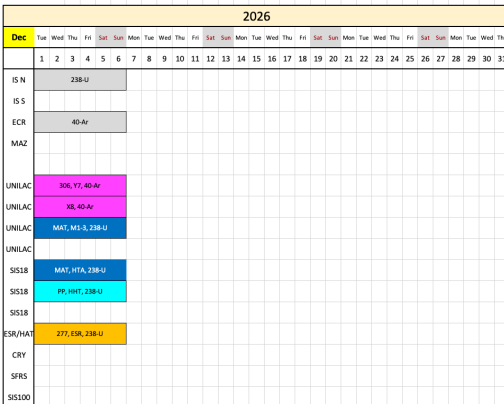
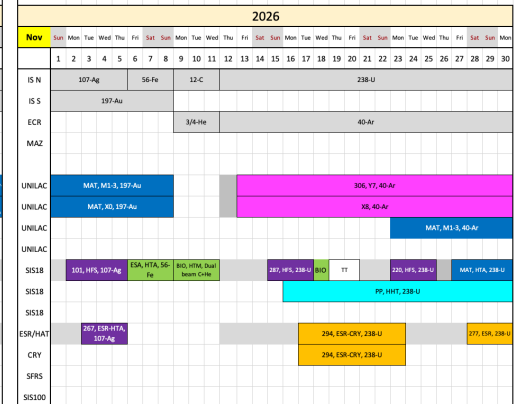
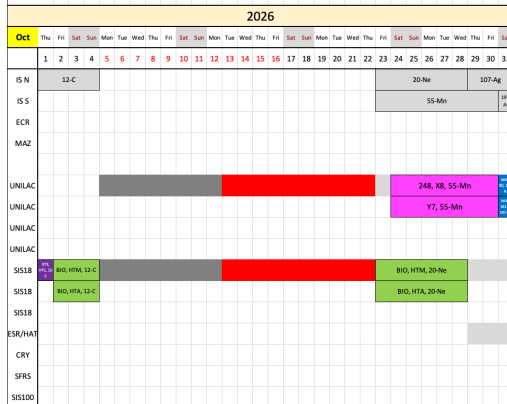
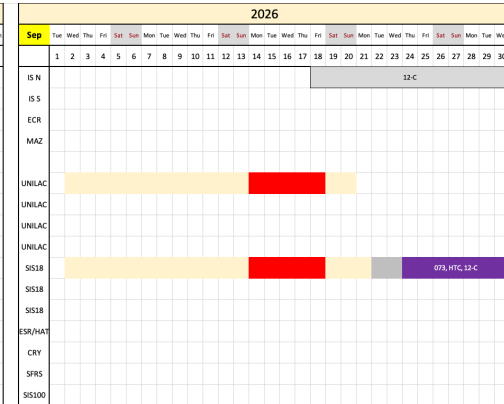
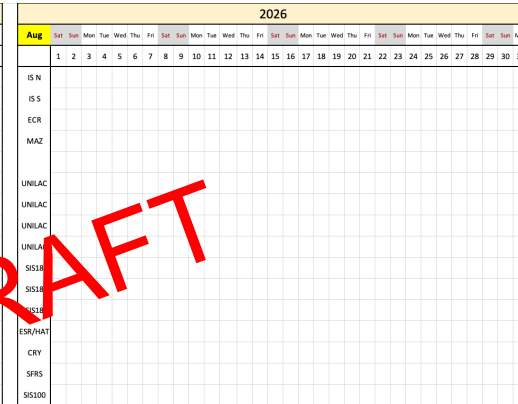
DRAFT 03.07.2025

GSI



Legend	User Beamtime	Days:	Shifts:
Bake Out	Unilac	112	336
Dry-Run	SIS18	112	336
Commissioning without Beam	ESR	106	318
Beam Commissioning	Cryring	112	336
Physics Run	Hitrap	106	318
Engineering Run / Machine Studies			
LINAC-RF commissioning			
\$688 radiation safety check	HKR besetzt	204	
Beam Setup			
Physics Run Cryring standalone			
Operator Training			
Technical Stop			

- Information**
- * spring- beamtime: full user beamtime
 - * FAIR beam has always priority in winter-beamtime
 - * Super FRS-Commissioning includes commissioning of Early-Science HEBT
 - * The early commissioning block UNILAC / SIS18 in Sept. and Oct. is to be interpreted such, that the GSI injector chain is to supply the beam for the beam-commissioning of Early-Science
 - * cool-down and warm-up of super conducting machines will be included later



2027 / 11

DRAFT

2027																															
Oct	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
x	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
IS N																209-Bi															
IS	PIG, Ar, Kr, Xe																														
ECR																										48-Ca					
MAZ																															
UNILAC																										306, 17, 48-Ca					
UNILAC																										248, X8, 48-Ca					
UNILAC																															
UNILAC																															
SIS1B																															
SIS1B																															
SIS1B																															
ESR/HAT																					237, ESR-HITRA7, 209-Bi										
CRY																															
SFRS																															
SIS100																															

[illegible]

2027																																
Dec	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	
+	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
IS N	238-U																															
IS S																																
ECR																	48-Car															
MAZ																																
UNILAC																	306, Y7, 48-Ca															
UNILAC																	X8, 48-Ca															
UNILAC																																
UNILAC																																
SIS18			276, HPS, 238-U																													
SIS18																																
SIS18																																
ESR/HAT																	281, ESR, 238-U															
CRY																																
SFRS											E5, HPS, 238-U																					
SIS100																																

DRAFT

2026																																				
Oct	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat					
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31					
IS N	12-C																						20-Ne				107-Ag									
IS S																							55-Mn						197-Au							
ECR																																				
MAZ																																				
UNILAC																															248, X8, 55-Mn		MAT: W8, 197-Au			
UNILAC																													Y7, 55-Mn						MAT: M53, 197-Au	
UNILAC																																				
UNILAC																																				
SIS18	GPS, HMC 12-C	BIO, HTM, 12-C																									BIO, HTM, 20-Ne									
SIS18			BIO, HTA, 12-C																					BIO, HTA, 20-Ne												
SIS18																																				
ESR/HAT																																				
CRY																																				
SFRS																																				
SIS100																																				

2026																																
Nov	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30		
IS N	107-Ag					56-Fe			12-C			238-U																				
IS S	197-Au																															
ECR									3/4-He			40-Ar																				
MAZ																																
UNILAC	MAT, M1-3, 197-Au										306, Y7, 40-Ar																					
UNILAC	MAT, X0, 197-Au										X8, 40-Ar																					
UNILAC																								MAT, M1-3, 40-Ar								
UNILAC																																
SIS18	101, HFS, 107-Ag					ESA, HTA, 56-Fe			BIO, HTM, Dual beam C+He							287, HFS, 238-U		BIO	TT				220, HFS, 238-U			MAT, HTA, 238-U						
SIS18																PP, HHT, 238-U																
SIS18																																
ESR/HAT	267, ESR-HTA, 107-Ag															294, ESR-CRY, 238-U													277, ESR, 238-U			
CRY																294, ESR-CRY, 238-U																
SFRS																																
SIS100																																

2026																																
Dec	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
IS N	238-U																															
IS S																																
ECR	40-Ar																															
MAZ																																
UNILAC	306, Y7, 40-Ar																															
UNILAC	X8, 40-Ar																															
UNILAC	MAT, M1-3, 238-U																															
UNILAC																																
SIS18	MAT, HTA, 238-U																															
SIS18	PP, HHT, 238-U																															
SIS18																																
ESR/HAT	277, ESR, 238-U																															
CRY																																
SFRS																																
SIS100																																

DRAFT

2027																																
JAN	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
IS N																																
IS S																																
ECR																																
MAZ																																
UNILAC																																
UNILAC																																
UNILAC																																
UNILAC																																
SIS18																																
SIS18																																
SIS18																																
ESR/HAT																																
CRY																																
SFRS																																
SIS100																																

2027																																
FEB	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun				
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28				
IS N	14-N														186-W																	
IS S															197-Au																	
ECR	48-Ca																															
MAZ																																
UNILAC	245, X8, 48-Ca														MAT, M1-3, 197-Au																	
UNILAC	Y7, 48-Ca														MAT, X0, 197-Au																	
UNILAC																																
UNILAC																																
SIS18	255, HAD, 14-N																	236, HFS, 186-W										256, HFS, 186-W				
SIS18																																
SIS18																																
ESR/HAT																																
CRY																																
SFRS																																
SIS100																																

DRAFT

2027																																	
MAR	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed		
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
IS N	209-Bi											12-C (CH4)			1-H (CH4)																		
IS S	197-Au																																
ECR												3/4-He																					
MAZ																																	
UNILAC	MAT, X0, 197-Au																																
UNILAC	MAT, M1-3, 197-Au																																
UNILAC																																	
UNILAC																																	
SIS18												BIO, HTM, Dual beam C+He					R3B, HTC, 1-H		BIO, HTM, 1-H		Koala, HTC, 1-H												
SIS18																						BIO, HTA, 1-H											
SIS18																						PP, HHT, 1-H											
ESR/HAT					290, ESR, 209-Bi																												
CRY																																	
SFRS																																	
SIS100																																	

2027																															
Oct	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
IS N															209-Bi																
IS S	PIG, Ar, Kr, Xe																														
ECR																									48-Ca						
MAZ																															
UNILAC																									306, Y7, 48-Ca						
UNILAC																									248, X8, 48-Ca						
UNILAC																															
UNILAC																															
SIS18																															
SIS18																															
SIS18																															
ESR/HAT																			257, ESR-HITRAP, 209-Bi												
CRY																															
SFRS																															
SIS100																															

2027																																					
Nov	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun		
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30							
IS N	209-Bi														206-Pb																						
IS S	PIG, Ar, Kr, Xe														56-Fe																						
ECR	48-Ca																																				
MAZ																																					
UNILAC	306, Y7, 48-Ca																																				
UNILAC	248, X8, 48-Ca																																				
UNILAC																																					
UNILAC																																					
SIS18												207, FRS-ESR, 209-Bi										ESA, 56-Fe, HTA															
SIS18																																					
SIS18																																					
ESR/HAT	257, ESR-HITRAP, 209-Bi															207, ESR, 209-Bi																				218, ESR, 206-Pb	
CRY																																					
SFRS																																					
SIS100																																					

DRAFT

2027																																			
Dec	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Mon	Tue	Wed	Thu	Fri				
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
IS N	238-U																																		
IS S																																			
ECR			48-Cac																																
MAZ																																			
UNILAC																																			
UNILAC																																			
UNILAC																																			
UNILAC																																			
SIS18			274, HFS, 238-U																																
SIS18																																			
SIS18																																			
ESR/HAT																																			
CRY																																			
SFRS																																			
SIS100																																			

Thanks for your attention

