

**Machine Studies**  
**Draft Schedule for Run03-1, 2022**  
Sept 6th 0800 – Sept 13st 0800

<b>Time</b>	<b>Descriptions</b>	<b>Studiers</b>	<b>SR Status</b>
	<b>Sunday, Sept. 4th, 2022 - Prestudies</b>		
Any time	Test PEM for 1 Hz/2 Hz switching and make 1 Hz injector UBOP files	Shang Fystro Harkay Calvey	No Beam & 1 Hz Injection
			No Beam
			No Beam
	<b>Monday, Sept. 5th, 2022 - Prestudies</b>		
0800-1000	Possible booster training		No Beam & 2 Hz Injection
1000-1600	booster LOCO measurement near extraction	Yao Shang	No Beam & 2 Hz Injection
			No Beam
	<b>Tuesday, Sept. 6th, 2022</b>		
0800-1000	MPS Validations	Smith/Flood	Stored Beam & 2 Hz Injection
1000-1100	Tune timing PVs (BTS:ICT and the booster extraction kicker)	Hong	Stored Beam & 2 Hz Injection
1000-2400	RF Conditioning with Beam (24 singlets)	Flood/OPS	Stored Beam & 2 Hz Injection
	<b>Wednesday, Sept. 7th, 2022</b>		
0000-0200	RF Conditioning with Beam (24 singlets)	Flood/OPS	Stored Beam & 2 Hz Injection
0200-0600	BPLD validations; X-ray bpm checks	Sereno	Stored Beam & 2 Hz Injection
0600-0900	Lattice and Dimtel checkout	Emery Yipeng	Stored Beam & 2 Hz Injection
0900-1100	BCM timing investigation with only 1 bunch in the SR. Check MRF robustness.	Hong	Stored Beam & 2 Hz Injection
1100-1300	Radiation study on RF coupler, including Zone F accesses before and after.	Health Physics, Horan	Zone F access Stored Beam & 2 Hz Injection
1300-1400	troubleshoot the Booster cavity 4 tuning loop	Berenc, Smith	Stored Beam & 1 Hz Injection

1300-1400	Train operators to switch 1 Hz/2 Hz	Fystro	Stored Beam & 1 Hz Injection
1400-1600	Adjust PAR bunch cleaning for 1 Hz	Yao Fystro	Stored Beam & 1 Hz Injection
1600-1700	Adjust PAR extraction timing for 1 Hz to center wfms and beam on PAR Scope	Yao Harkay	Stored Beam & 1 Hz Injection
1700-1900	Verify correct bucket targeting at 1 Hz fill from zero	Emery Harkay	Stored Beam & 1 Hz Injection
1900-2400	Investigate S37 cavities to determine which one is outgassing	Emery Harkay	Stored Beam & 2 Hz Injection
<b>Thursday, Sept. 8th, 2021</b>			
0000-0800	Open		
0800-1200	Commission booster SLM3 (2 Hz)	Calvey Wootton Dooling	Stored Beam & No Injection
1200-1500	Linac K2 software development I. Fill 324 bunches for SR (2 Hz)	Fystro, Soliday	Stored Beam & No Injection
1500-2100	Unified Feedback test, 324 bunches	Kallakuri, Sereno, Brill	Stored Beam & 2 Hz Injection
1530-1730	Booster tune up in parallel to above. 1 Hz or 2 Hz	Calvey	Stored Beam & Injection
2100-2300	Verify bunch purity at 1 Hz	Yipeng Harkay	Stored Beam & 1 Hz Injection
2300-2400	Dimtel pick-up and kicker calibration	Emery	Stored Beam & 1 Hz Injection
<b>Friday, Sept. 9th, 2022</b>			
0000-0100	Dimtel pick-up and kicker calibration	Emery	Stored Beam & 1 Hz Injection
0100-0800	S25ID XBPM Calibration. 324 bunches 100 mA.	Yang	Stored Beam & 2 Hz Injection
0800-1100	Test the injtime DG645s. First run injection and get a snap shot of injection efficiency and timing setting. Reboot iocinjtime with the DG645s and run injection again. 2 Hz	Hong	Stored Beam & Injection
1100-1400	SR BPM offsets. 324 bunches 100 mA refill.	Yipeng	Stored Beam & No Injection
1100-1400	Linac L5/6 RF system and the RF read back system test with the new timing system	Hong, RF group, Fystro	Stored Beam & No Injection
1400-1800	Fix storing ring injection efficiency calculation for 1 Hz	Yao Shoaf	Stored Beam & 1Hz Injection

1800-2400	RF conditioning from 60 mA	Ops	Stored Beam & 1Hz Injection
<b>Saturday, Sept. 10th, 2022</b>			
0000-1000	RF conditioning	Ops	Stored Beam & Injection
1000-1100	Linac RFG kicker test with the new timing system (2 Hz)	Hong	Stored Beam & No Injection
1100-1600	Orbit Recovery from 324 bunch UBOP to 24 bunches.	Yipeng	Stored Beam & 1 Hz Injection
1600-2000	IEX/CPU checkout. 324 bunches. (2 Hz)	Emery Yipeng	Stored Beam & 2 Hz Injection
2000-2400	IEX/CPU correction if necessary. 324 bunches	Emery	Stored Beam & (2 Hz) Injection
<b>Sunday, Sept. 11th, 2022</b>			
0000-0400	Top-up verification at 1 Hz	Kuklev Harkay	Stored Beam & 1 Hz Injection
0400-0800	Top-up verification at 2 Hz	Kuklev Harkay	Stored Beam & 2 Hz Injection
0800-1100	Open	Hong	Stored Beam & No Injection
1100-1400	Linac K2 software development II. 2 Hz	Fystro, Soliday	Stored Beam & No Injection
1400-1600	Abort kicker checkout	Yipeng	Stored Beam & 1 Hz Injection
1600-2000	Final lattice checkout	Emery/Yipeng	Stored Beam & 1 Hz Injection
2000-2400	Bunch purity verification	Yipeng Harkay	Stored Beam & 1 Hz Injection
<b>Monday, Sept. 12th, 2022</b>			
0000-0600	6 GeV Stability. 1 or 2 Hz.	Emery	Stored Beam & Injection
0800-1800	IETS	Wienans, Fors	Stored Beam & 1Hz Injection
1800-2400	Final set-up of bunch purity monitor and pinhole camera, measure sector P1 offset	Yang Yipeng	Stored Beam & 1 Hz Injection
1800-1900	Steering software checkout, as permitted by above study	Emery Shang	Stored Beam & 1 Hz Injection
<b>Tuesday, Sept. 13th, 2022</b>			

<b>0000-0600</b>	<b>S28ID XBPM calibration study, 100 mA, top-up optional</b>	<b>Yang</b>	<b>Stored Beam &amp; Injection</b>
<b>0600-0800</b>	<b>Prepare for User beam</b>	<b>OPS</b>	