

# Machine Studies

## Draft Schedule for Run01-1, 2023

Jan 23th 0800 – Jan 31st 0800

<b>Time</b>	<b>Descriptions</b>	<b>Studiers</b>	<b>SR Status</b>
<b>Monday, Jan 23, 2023 - Prestudies</b>			
<b>0800-1000</b>	<b>MPS Validations</b>	<b>CTLS/Ops</b>	<b>No Injection</b>
<b>1000-1200</b>	<b>Assess Nb3Sn chamber aperture 25 mA (3.3.1.1 of Nb3Sn commissioning plan)</b>	<b>Emery</b>	<b>Stored Beam &amp; Injection</b>
<b>1200-2400</b>	<b>RF Conditioning with Beam to 115 mA (24 singlets)</b>	<b>RF/Ops</b>	<b>Stored Beam &amp; Injection</b>
<b>1200-2400</b>	<b>Nb3Sn transparency tests with beam accumulation (3.3.2.1 3.3.2.2 of Nb3Sn CP)</b>	<b>Yipeng</b>	<b>Stored Beam &amp; Injection</b>
<b>1200-2400</b>	<b>S37 scraper transparency tests with beam accumulation (n.n.n.n of S37scraper CP)</b>	<b>Yipeng</b>	<b>Stored Beam &amp; Injection</b>
<b>~1500</b>	<b>Pinhole camera initial set-up (above 50 mA) parallel to RF conditioning</b>	<b>Yang</b>	<b>Stored Beam &amp; Injection</b>
<b>~1600</b>	<b>BCM Gen 3 checkout</b>	<b>Emery</b>	<b>Stored Beam &amp; Injection</b>
<b>~1700</b>	<b>BPM checkout (parallel to RF conditioning)</b>	<b>Sereno</b>	<b>Stored Beam &amp; Injection</b>
<b>Tuesday, Jan 24, 2023</b>			
<b>0000-0800</b>	<b>Open if needed for continued RF conditioning with beam</b>	<b>RF/Ops</b>	<b>Stored Beam &amp; Injection</b>
<b>1000-2130</b>	<b>Resume RF Conditioning with Beam to 115 mA (24 singlets)</b>	<b>RF/Ops</b>	<b>Stored Beam &amp; Injection</b>
<b>2130-0030</b>	<b>BPLD validations plus X-BPM sanity check</b>	<b>Sereno</b>	<b>Stored Beam &amp; Injection</b>
<b>Wednesday, Jan 25, 2023</b>			
<b>0030-0130</b>	<b>Setup Dimtel timing</b>	<b>Emery Yipeng</b>	<b>Stored Beam &amp;</b>

			<b>Injection</b>
<b>0130-0330</b>	<b>Lattice set up [not done]</b>	<b>Emery</b>	<b>Stored Beam &amp; Injection</b>
<b>0330-0730</b>	<b>Orbit recovery [moved to later]</b>	<b>Yipeng</b>	<b>Stored Beam &amp; Injection</b>
<b>0730-1000</b>	<b>Accumulation limits checks with Nb3Sn off (3.3.2.3 of Nb3Sn CP) and with S37 scraper (n.n.n.n of scraper CP) [Done earlier at 0400]</b>	<b>Emery</b>	<b>Stored Beam &amp; Injection</b>
<b>1000-1200</b>	<b>Accumulation with Nb3Sn on (3.3.3.1)</b>	<b>Yipeng</b>	<b>Stored Beam &amp; Injection</b>
<b>1200-1400</b>	<b>beam dump test with Nb3Sn on (3.3.3.2)</b>	<b>Dooling</b>	<b>Stored Beam &amp; Injection</b>
<b>1400-1800</b>	<b>Tune measurement testing with Dimtel processor</b>	<b>Kallakuri, Sereno</b>	<b>Stored Beam &amp; Injection</b>
<b>1800-2200</b>	<b>RG1 study #1</b>	<b>Yine, Lobach, Dooling, Fystro</b>	<b>Stored Beam &amp; No Injection</b>
<b>2200-2400</b>	<b>S25ID GRID-XBPM New detector calibration</b>	<b>Yang</b>	<b>Stored Beam &amp; Injection</b>
<b>Thursday, Jan 26, 2021</b>			
<b>0000-0600</b>	<b>S25ID GRID-XBPM New detector calibration</b>	<b>Yang</b>	<b>Stored Beam &amp; Injection</b>
<b>0600-1200</b>	<b>Dosimetry on turbo pump near Septum (zone F). See items below.</b>	<b>Vacuum, Henry</b>	<b>Various</b>
<b>0600-0730</b>	<b>Zone F access for dosimetry</b>	<b>Vacuum, Henry</b>	<b>Access Zone F</b>
<b>0730-0800</b>	<b>Run beam into SR septum for dosimetry</b>	<b>Ops</b>	<b>Stored Beam &amp; Injection</b>
<b>0800-1200</b>	<b>Accesses into SR (one in Zone F)</b>		<b>Access Zone F</b>
<b>0830-1130</b>	<b>HSCU liquid He flow work/NbSCU photo op</b>	<b>MD Group</b>	<b>Access Zone A</b>
<b>0800-1200</b>	<b>Recover turbo pump dosimeters</b>	<b>Vacuum, Henry</b>	<b>Access Zone F</b>
<b>0800-1000</b>	<b>PSS end-to-end tests</b>	<b>Boron</b>	<b>No Beam &amp; No Injection</b>
<b>0800-1200</b>	<b>Linac K2 DLLRF test without beam, part I</b>	<b>Yawei, Pietryla, Fystro</b>	<b>No Beam &amp; No Injection</b>
<b>0800-1200</b>	<b>Booster dipole current tests</b>	<b>Calvey, Puttkammer, Shang</b>	<b>No Beam &amp; No Injection</b>
<b>1230-1730</b>	<b>PAR digital LLRF for injection into booster</b>	<b>Berenc, Calvey, Fystro</b>	<b>Stored Beam &amp; Injection</b>
<b>1730-2130</b>	<b>RG1 study #2</b>	<b>Yine, Lobach, Dooling, Fystro</b>	<b>Stored Beam &amp; No Injection</b>
<b>1730-1830</b>	<b>SR Kicker waveform recording</b>	<b>Emery</b>	<b>Stored Beam &amp;</b>

2130-2400	S25ID new XBPM calibration	Yang	No Injection Stored Beam & Injection
<b>Friday, Jan 27, 2023</b>			
0000-0800	S25ID XBPM cross talk and thermal Drift	Yang	Stored Beam & Injection
0800-1200	Linac K2 DLLRF test without beam, part II	Yawei, Pietryla, Fystro	Stored Beam & No Injection
1200-1215	Refill ring 324 bunches		
1200-1600	<del>Orbit Recovery</del> IEX/CPU checkout (324 bunches)	Yipeng	Stored Beam & Injection
1215-1600	Booster tune up	Calvey	No injection
1600-1800	Orbit recovery	Yipeng	
1800-2200	Nb3Sn beam perturbations (3.3.3.4 in Nb3Sn CP)	Emery	Stored Beam & Injection
2200-0200	PAR P2IK tuning	Harkay	Stored Beam & No Injection
<b>Saturday, Jan 28, 2023</b>			
0200-0500	Open		Stored Beam & Injection
0500-0900	<del>IEX/CPU checkout (324 bunches)</del> Open		Stored Beam & Injection
0900-1500	Linac K2 DLLRF test with beam	Yawei, Pietryla, Fystro, Yin-e	Stored Beam & Injection
1500-2400	Orbit control for Nb3Sn with xbpms (3.3.4 in Nb3Sn CP)	Emery Yipeng Shang	Stored Beam & Injection
<b>Sunday, Jan 29, 2023</b>			
0000-1300	25-ID-FE XBPM coupling, thermal stability/drift	Bingxin	Stored Beam & Injection
1300-1700	1Hz checkout	Harkay	Stored Beam & Injection
1700-1800	Open		Stored Beam & Injection
1800-2100	Dimtel feedback self-training	Yipeng	Stored Beam & Injection
2100-2400	Open		Stored Beam & Injection
<b>Monday, Jan 30, 2023</b>			
0000-0100	SCU1 FF checkout		Stored Beam &

			<b>Injection</b>
<b>0100-0300</b>	<b>Open</b>		<b>Stored Beam &amp; Injection</b>
<b>0300-0600</b>	<b>Linac ML studies</b>	<b>Kuklev</b>	<b>Stored Beam &amp; No Injection</b>
<b>0600-1000</b>	<b>RG1 study</b>	<b>Yine</b>	<b>Stored Beam &amp; No Injection</b>
<b>1000-1200</b>	<b><del>Abort kicker checkout</del> Open</b>		<b>Stored Beam &amp; Injection</b>
<b>1200-1600</b>	<b>Final lattice checkout</b>	<b>Emery</b>	<b>Stored Beam &amp; Injection</b>
<b>1800-2400</b>	<b>Final set-up of bunch purity monitor (3 h) and pinhole camera (3 h)</b>	<b>Yang/Yipeng</b>	<b>Stored Beam &amp; Injection</b>
	<b>Tuesday, Jan 31, 2023</b>		
<b>0000-6300</b>	<b>ID25 xbpm data redo</b>	<b>Yang</b>	<b>Stored Beam &amp; Injection</b>
<b>0630-0800</b>	<b>Prepare for User beam</b>	<b>OPS</b>	