

# Machine Studies

## Schedule for Run24-2, 2024

September 9th 0800 – September 16th, 0800

Time	Descriptions	Studios	SR Status
<b>Monday, September 9, 2024</b>			
0800-1200	MPS validations, Main and BM BPLDs	Bui, M. Smith, Shang	Stored Beam & Injection
1200-1600	RF conditioning with beam – 162 bunches try for more 120 mA. Decide on RF voltage	Emery	Stored Beam & Injection
1200-1600	Look for ion effects	Calvey	Stored Beam & Injection
1200-1600	Verify logging of PSD; check orbit stability	Borland	Stored Beam & Injection
1600-2000	Check super-slow 3-second kick-out using >5 nC bunches	Harkay	Stored Beam & Injection
1600-2000	Check trajectory PVs;  Measure Optics (< 11 mA)	Emery	Stored Beam & Injection
2000-2400	Finish any pem testing in injectors	Fystro	Limited Injection
<b>Tuesday, September 10, 2024</b>			
0000-0300	Septum FF with trajectory data collection	Mohsen Emery	Stored Beam & Injection
0300-0800	Debug non-linear optimization	Kuklev	Stored Beam & Injection

<b>0800-1600</b>	<b>BLS quench detection</b>	<b>Berenc, Kelly, Horan</b>	<b>Stored Beam &amp; Injection</b>
<b>1600-1800</b>	<b>SR Hands on training</b>	<b>Emery, COs</b>	<b>Stored Beam &amp; Injection</b>
<b>1800-2100</b>	<b>LFB timing check</b>	<b>Brill, Kallakuri</b>	<b>Stored Beam &amp; Injection</b>
<b>2100-2400</b>	<b>Correct Optics due to ATL, if necessary</b>	<b>Sajaev</b>	<b>Stored Beam &amp; Injection</b>

**Wednesday, September 11, 2024**

<b>0000-0600</b>	<b>Open</b>		<b>Stored Beam &amp; Injection</b>
<b>0600-0800</b>	<b>SR Hands on training</b>	<b>Emery, COs</b>	<b>Stored Beam &amp; Injection</b>
<b>0800-1200</b>	<b>New IES firmware for target bunch tracking</b>	<b>Wang</b>	<b>Stored Beam &amp; Injection</b>
<b>1200-1600</b>	<b>PAR kicker noise suppression</b>	<b>T. Smith</b>	<b>Stored Beam &amp; No Injection</b>
<b>1200-1600</b>	<b>Validation of Swap-out software update</b>	<b>Borland</b>	<b>Stored Beam &amp; No Injection</b>
<b>1600-2100</b>	<b>MOFB, strive for speed</b>	<b>Borland Arnold</b>	<b>Limited Injection</b>
<b>2100-2400</b>	<b>BPM dependency study</b>	<b>Weixing</b>	<b>Stored Beam &amp; Injection</b>

**Thursday, September 12, 2024**

<b>0000-0300</b>	<b>BPM dependency study</b>	<b>Weixing</b>	<b>Stored Beam &amp; Injection</b>
<b>0300-0800</b>	<b>Non-linear Optimization</b>	<b>Kuklev</b>	<b>Stored Beam &amp; Injection</b>

0800-1200	Access into Linac	OPS	No Beam
0800-1200	M1 firmware update	PS group	No Beam
1200-1600	MOFB optimizations	Borland Emery Shang	Stored Beam & Injection
1600-2400	BLS cavity conditioning	Berenc Wienands Kelly	Stored Beam & Injection

**Friday, September 13, 2024**

0000-0400	BPM single-pass dependency study, part I	Weixing	Stored Beam & Injection
0400-0800	Open		Stored Beam & Injection
0800-1200	ID BPLD Validation (Part II of MPS validations). Slow OFB is ok.	Bui, M. Smith, Shang	Stored Beam & Injection
1200-1400	Steering & MOFB training	Emery, COs, Calvey	Stored Beam & Injection
1400-2000	RG1 studies	Sun	Stored Beam & No Injection
2000-2400	Booster tuner operation modes	Calvey Berenc	Stored Beam & Limited Injection

**Saturday, September 14, 2024**

0000-0400	<del>Tune Measurement with coupling</del> Vacuum conditioning to 110 mA	<del>Kallakuri</del> Emery, OPS	Stored Beam & Injection
0000-0400	Check new ID steering knobs	Emery	Stored Beam & Injection
0400-0600	<del>Septum FF</del> Vacuum conditioning to 110 mA	<del>Mohsen</del> Emery, OPS	Stored Beam & Injection
0600-1200	Non-linear Optimization	Kuklev	Stored Beam & Injection

1200-1400	<del>Check super-slow 3-second kick-out using &gt;5 nC bunches</del>	Harkay	Stored Beam & Limited Injection
1400-2000	<del>M1 dipole tuning/ Booster ramp studies with MOFB medley Vacuum conditioning to 110 mA</del>	Kuklev, OPS	Stored Beam & Injection
2000-2400	BPM single-pass dependency study, part II	Weixing	Stored Beam & Injection

**Sunday, September 15, 2024**

0000-0600	Vacuum conditioning to 110 mA	Emery, OPS	Stored Beam & Injection
0600-1400	PAR beam loading	Harkay	Stored Beam & Injection
1400-1800	RF voltage FF	Borland Emery	Stored Beam & Injection
1800-2400	RG1 studies	Sun	Stored Beam & Injection

**Monday, September 16, 2024**

0000-0600	HOM measurements	Emery Kallakuri	Stored Beam & Injection
0600-0800	Prepare for User Beam Operations 100 mA – 162 bunches	OPS	Stored Beam & Injection