

Summary of work done

C.Y. Tan
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Status of PSP projects

Machine	Description	People	Status
Pre-Acc	Improve neutralization in LEPT with N or Xe.	Dan/Haider	First measurement of emittances in test stand (29 Mar 2019). Looks like we need more pumping. Extra pump installed (10 Apr)
Pre-Acc	Penning source from RAL is in Illinois!	Haider/Dan/Pat	Finally shipped from UK.
Pre-Acc	Laser collimation of head/tail of longitudinal beam. (LDRD)	Dave	In contact with vendor for selection of optical engine.
Pre-Acc/Linac	Simulation of PreAcc + Linac	Valeriy/Kiyomi/Dan	Scans were done during machine studies day (20 Feb). See Valeriy's talk today.
Pre-Acc/Linac	Checking efficiency with increased current in LEPT corrector	Kiyomi/Dan/Pat	Scan of LEPT correctors were done during study period (23 Jan 2019). To be completed during next study period in February.
Booster	Flat injection porch	Bill/Kiyomi/George/Howie/Chris	Kiyomi is working on the ramp field amplitude jitter correction.
Booster	Adiabatic capture	Chandra/Tan	Data shows problem with RFsum in the control room. This RFsum does not come directly from the gap. Will get new "gap" RF signal. Phase measurements need to be redone.
Booster	2 nd harmonic	Robyn/Tan	In test cave (29 Mar 2019). Water connected to LCW. Cabling nearly ready. Waiting for power connection to bias solenoid. Expect to start testing some time next week.
Booster	Wide bore cavities	Salah/Matt	Vacuum leak in either window or braze joint of window. (28 Mar 2019). Grinding to remove bad window (05 Apr).
Booster	2 stage collimators	Valeriy/Chandra	Had meeting on 12 Dec 2018 to decide on the length of the primary collimator. Work to see amount of shielding needed for tritium control in sump water.
Booster	Injection girder and injector civil construction to Booster	Dave/Salah/ Tan	Meiqin's lattice looks good using "sewer" pipe for a chute for last 10.897 m into Booster. Safety egress and equipment access being assessed.
Booster	Garnet loss improvements	Robyn/Tan	Got task codes (05 Apr). Work to start soon. First meeting will be on Monday 15 Apr.
Booster	Mode 2 longitudinal damper	Nathan	Requires new broadband cavity. Also need specs. (benefits PIP1+)
LLRF	GMPS machine learning (get rid of reference magnet)	Bill/Brian/Kiyomi	Got task codes (05 Apr). Work to start soon.
LLRF	Complete DDS upgrade, paraphase controller	Brian/Ed	Paraphase module has been tested. 90 deg removed. Will test during next study period.
LLRF	Phase feedback	Brian/Ed/Bill/Tan/Valeri/Craig	Ed is working on a first pass of the feedback for injection. Meet soon to discuss next step.

House keeping

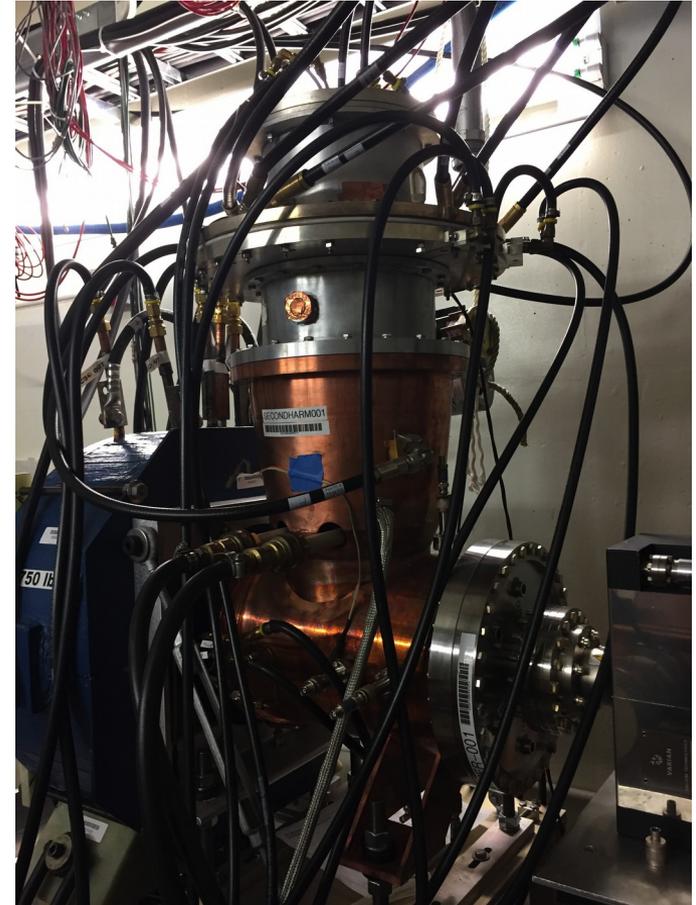
Machine	Description	i/c	Comments
Linac	7835	Kiyomi/Tan	Req. was sent out. 1 new 7835 and 3 for TC&A.
Linac	Klystron refurbishment	Kiyomi/Bill/ Tan	Will visit L3.
Booster	BPM	Salah/Peter	Declared success on 8 March. Snapshot still needs work. TBT mostly ok.
Booster	Longitudinal coupled bunch mode dampers	Nathan/Bill	Alexy is nearly done with firmware update. Will test this week.

2nd harmonic in cave



Cavity is nearly ready for testing.
Water has been connected.
Cabling to be completed.

Must share space with MI 2 PA cavity test.



Wide bore cavity leak



Leak is on the ceramic. 11 Apr 2019.