

Linac4 action list

	action	person	status	date
SM18 high-power test stand				
<input type="checkbox"/>	enable remote control of modulator	Jose/Tomoko/Sven	Sven will receive access rights for technical network during next 2 weeks, in the mean time Jose has proposed to pull a cable with one of our FSUs to accelerate having a direct contact, end of next week this should enable remote control	22-Aug-13
<input type="checkbox"/>	RGA on module 2 before stop of conditioning	Frank/Jan		
<input type="checkbox"/>	exchange pumps in bunker, replace ion with turbo pumps when module 3 is installed	Frank/Jan		
<input type="checkbox"/>	dark current plot for module 2	Tomoko		
<input type="checkbox"/>	exchange module 2 with module 3		end August/beginning September	
<input type="checkbox"/>	power/pick-up calibration with power meter	Han/Jose		
<input type="checkbox"/>	buy 2nd power meter	Han	on 69742	
<input checked="" type="checkbox"/>	meeting next week with David Glenard, Sven's replacement (Machado), Luca, Tomoko, Pierre, to resolve the modulator trip problem	Frank	decided to install a scope (30. Aug. Christophe Machado) to monitor what happens when the modulator trips: too much noise on the FAST_PA loop current -> power supply was exchanged	28-Aug-13
<input type="checkbox"/>	problem with cooling capacity: cavity temperature changes during the day			29-Aug-13
<input type="checkbox"/>	need a temperature measurement of incoming water for module 3	Tomoko/Jose		
<input type="checkbox"/>	need automatic frequency tuning to compensate	Tomoko/Jose		
movable tuners				
<input checked="" type="checkbox"/>	one tolerance for the guiding of the piston was not kept, CECOM needs to be notified and we need correction for the series	Yves/Frank	told CECOM that we need at least until mid-September to give the green light for the series	28-Aug-13
<input checked="" type="checkbox"/>	test of pre-series on test set-up	Jose	PIMS type coupler has been tested	15-Aug-13
<input type="checkbox"/>	evaluation of pre-series test	Jose		
<input checked="" type="checkbox"/>	measurement of piston alignment for tested pre-series coupler and for the 2nd pre-series coupler (as yet un-tested)	Yves	CERN tuners are well aligned, CECOM pistons are not and have to be corrected, the DTL type tuner which was not yet used is misaligned by 1.5 mm	12-Sep-13
<input checked="" type="checkbox"/>	make RF test of tuner with and without RF joint	Yves/Han/Frank/Vince	there was no visible difference in Q of the cavity mode with or without joint for all tuner positions, neither could a 2nd resonance be detected: decided to remove all RF joints and to repeat these measurements for all tuner/cavity types	12-Sep-13
<input type="checkbox"/>	clarify if CECOM is happy that we correct the alignment of the DTL tuner piston and start another IKEA test using plastic guidance instead of RF joints	Frank	contacted Francesco, waiting for answer	12-Sep-10
<input type="checkbox"/>	discuss modified piston guidance with Alessandro/vacuum group	Yves		
<input type="checkbox"/>	prepare test of DTL type coupler with inclination	Jose/Yves		
<input type="checkbox"/>	try prototype on Indian coupler to see if penetration is sufficient for matching in SM18	Rolf/Jose		
3 MeV test stand				
<input checked="" type="checkbox"/>	RF measurements on new buncher pick-ups, frequency change by pick-ups + holder and calibration	Han	frequency change incl. pick-up 12.5 kHz max, calibration will be done in a tunnel, pick-ups showed a resonance close to the accelerating mode and need to be re-designed	28 Aug 2013
<input type="checkbox"/>	modification of 3+1 (spare) existing mobile tuners to L4 standards	Yves	parts are being fabricated by CERN workshop	
<input type="checkbox"/>	3D field map of buncher cavity	Tomoko		
3 MeV installation in Linac4				
<input type="checkbox"/>	amplifier qualification for buncher amplifiers in Italy	Han/Jose	week 36	
<input checked="" type="checkbox"/>	3 trombones for phase adjustment where recuperated to reduce reflected power during filling/decay	Han/JM	successfully tested, will be used in Linac4	29-Aug-13
<input type="checkbox"/>	delivery of buncher amplifiers and positioning in Linac4	Han/Jose	week 38	
<input type="checkbox"/>	scaffolding for RF feeder line installation	Han	week 40	
<input type="checkbox"/>	install RF feeder lines for buncher cavities	db	week 41, postponed in L4TC	
<input type="checkbox"/>	install RF feeder line for debuncher	db	week 41, postponed	
<input type="checkbox"/>	RF tests on buncher amplifiers	Han/Jose	week 41 - 43, postponed	
<input type="checkbox"/>	circulators order to limit reflected power to ss-amps	Han	amps can take 10% reflected power, but this is quickly reached during filling/discharging, can be ordered via db but with a long delay, in the mean time we can operate with "slow filling time" from Philippe and with reducing reflected power using the trombones	29-Aug-13
<input type="checkbox"/>	re-heating system	Jose	design office will finish work until end of August, start-up of RFQ can be done without	
<input type="checkbox"/>	slug tuners are not yet cooled	Jose		
<input checked="" type="checkbox"/>	remove 3d buncher cavity from MEBT, remove copper bits which fell down from damaged RF joint, re-install	Yves	cavity was "hoovered" and the scratched port was smoothed, now preparing for re-installation	29-Aug-13
<input checked="" type="checkbox"/>	solution for cooling water for buncher circulators	Han/Jose	most likely from source water supply	12-Sep-13
<input type="checkbox"/>	interlock tests/commissioning before beam start-up	Jose	tests in ~2 weeks	
<input type="checkbox"/>	re-design and fabrication of buncher pick-ups	Yves/Frank		
<input type="checkbox"/>	beam start mid week 42			
waveguide couplers				
construction in India				
<input checked="" type="checkbox"/>	send RGA results	Frank		21-Aug-13
construction at CECOM				
<input checked="" type="checkbox"/>	material order for series (incl India)	Yves	went out	6-Jun-13
<input type="checkbox"/>	welding tests will be qualified during August + machining sample	Suitbert	welding samples arrived, given to material tests	29-Aug-13
<input checked="" type="checkbox"/>	clarify if CECOM can produce more couplers if needed	Suitbert	yes, but delay needs to be clarified	12-Jul-13
<input type="checkbox"/>	storage space for raw material	Vince/Yves/Frank	150 or SMA18	
<input type="checkbox"/>	packaging of raw material (series) for CECOM	Yves/JM	will be delivered after acceptance test of pre-series, delivery will take place probably in October,	
<input type="checkbox"/>	weld qualification tests at 2nd company	Suitbert	samples have been sent to company	29-Aug-13
jacks				
<input checked="" type="checkbox"/>	5 cases with shims and spacers from Bulgaria arrived, DTL & CCDTL,	workshop/Yves	reception tests going on at central workshop,	20-Jun-13
<input checked="" type="checkbox"/>	received 3+1 2.5 t jacks, which can be used for CCDTL 3	Yves/Suitbert		29-Aug-13
<input type="checkbox"/>	complete series of 2.5 and 5 t jacks	Yves/Suitbert	probably end of October (earlier than foreseen)	
<input checked="" type="checkbox"/>	3 existing 2.5 t jacks to be installed for RFQ,	Benoit	probably today, 13-June	20-Jun-13
<input type="checkbox"/>	install jacks for CCDTL module 3	Frank/Benoit		
<input checked="" type="checkbox"/>	reception of remaining of 1 t jacks	Yves	expected until mid-June, reception test still to be made	13-Jun-13
CCDTL				
assembly in SM18				
<input type="checkbox"/>	quad installation module 6	JB		
<input type="checkbox"/>	quad installation module 7	JM/JB	one quad faulty	15-Aug-13
<input type="checkbox"/>	conditioning of module 3	Tomoko/Jose/Frank		
<input type="checkbox"/>	verify if all survey results are done	Frank		
DTL				
construction				
<input type="checkbox"/>	fabrication of Al covers for ports for vacuum tests,	Yves	fabrication launched	
<input type="checkbox"/>	final machining of covers tank2,3			
<input checked="" type="checkbox"/>	delivery T3S4	Suitbert	received but needs some repairs,	12-Sep-13
<input type="checkbox"/>	Cu plating T3S4	Yves	end of September	
<input type="checkbox"/>	assembly of T1S1 and T1S2	Yves/Suitbert		
PIMS				
<input type="checkbox"/>	go through Patricia's work on tuning curves for tuning islands, complete simulations, calculate curves and tables the 3 different cell types for cavity M	Rolf	good progress, so far we seem to be well prepared	
<input type="checkbox"/>	qualification of disc production for series	CERN workshop	ok given for discs of cavity 3 and 4 (coaxiality problem (4 times tolerance) => waiting for metrology of fully assembled cavity, steps on nose cone tip => waiting for high power test results)	
<input type="checkbox"/>	metrology of central disc M_8-9 and ring M_9-10	Rolf	not yet received	
<input type="checkbox"/>	metrology and brazing analysis of waveguide ring M	Rolf	needs repair,	
<input type="checkbox"/>	prepare tooling for surface treatment of discs	Yves/Rolf	discussed with Marc, principle to be discussed with Yves, Yves started design/calculation work	15-Aug-13
<input type="checkbox"/>	assembly and inspection of cavity M	Rolf		
<input type="checkbox"/>	if time permits, optimise tuning of PIMS cavities (Octave routines, network analyser communication, intelligent tuning suggestion)	Rolf		
<input type="checkbox"/>	determine amount of re-machining for all discs cavity M	Rolf		
<input type="checkbox"/>	re-machining of discs cavity M	Rolf		
<input type="checkbox"/>	problem with ring M11-12 prevents green light for series until	Rolf	trapped volume of air can probably be opened to cavity vacuum	
<input type="checkbox"/>	tunnel installation of PIMS1 after open day	Rolf/JM		
windows				
<input checked="" type="checkbox"/>	arrange a permanent window conditioning test place in Linac4 bld.	Frank	7 windows should be ready for peak power testing in July, before they are tested at 40 kW CW by Eric, Decided to start window conditioning in 3 MeV test place and to do PIMS conditioning in SM18 until we have to move out (mid-2014?)	7-Jun-13
<input checked="" type="checkbox"/>	water available in 3 MeV from beginning of September to end of October, notify Eric	Frank		
<input checked="" type="checkbox"/>	order of fixed-point supports for waveguides	Frank/Benoit	order went out via MME and is paid by Oliviers budget, installation and follow-up is done by LRF	4-Sep-13
SPL/HOM				
MTF				
<input checked="" type="checkbox"/>	prepare stay of Raul Valera Teruel	SR/FG	1.st of July, agreed to come	1-Jul-13
<input type="checkbox"/>	MTF input DTL	SR/RVT		
<input type="checkbox"/>	MTF input CCDTL	SR/FG/RVT		
<input type="checkbox"/>	MTF input PIMS	FG/SR/RVT		
<input type="checkbox"/>	MTF input buncher cavities	FG/SR/RVT		
A.O.B.				
<input type="checkbox"/>	transport of CCDTL & DTL prototypes, and RFQ vane to Linac4 exhibition area for open day	Yves	request for transport launched	9-Sep-13
<input type="checkbox"/>	revision of RF structure transport into tunnel (meeting with Catherina, Rolf, Suitbert, Frank)			

Operations & maintenance

	action	person	status	date
shut-down work				
	Modulator	Vince	done	
Frank James				
<input type="checkbox"/>	prepare a complete spare amplifier (apparently all pieces are available from Linac3 spare amplifier),	Vince/Han/ Frank	missing is the ramping up of filament system, including testing ~60 kCHF, agreement by Erk that this project will be financed one way or another	
<input type="checkbox"/>	RFQ cavity base: try to remove some corrosion from all the fixed parts to avoid that rust gets into the movable parts, verify if there is a water leak (internal/external) responsible for corrosion and apply some spray...	Vince/JM	needs water to fully test,	
<input type="checkbox"/>	completion of 4 FJ amps (buncher, debuncher L2), capton needs to be ordered, installed tested (CU plating to be clarified)	Han		
	Linac2 maintenance	Vince	basically done	18-Jul-13
<input type="checkbox"/>	Linac3 maintenance	Vince	stopped until mid-September because a big AC unit was placed before the amplifiers to replace the regular unit during maintenance work	
<input type="checkbox"/>	RFQD maintenance	Vince		
machine operation				
<input checked="" type="checkbox"/>	water cut			1-Jun-13
<input checked="" type="checkbox"/>	define date when we need the water back for amplifier test	JM	for everything else we need water 1 month before start up. Added another 1 month for JM's amplifier test. FG sent a request to Detlef	30-May-13
<input type="checkbox"/>	clarify when water is back	Frank		
REX upgrade				
<input checked="" type="checkbox"/>	request of accurate phase measurement of phase shifters (1/2 deg) is declined because of manpower reasons	Han	request by Mathew	30-May-13
<input type="checkbox"/>	shipping of amplifier to Bertronix	Han	everything packed, now preparing shipping papers to make sure no TVA is paid, shipping will be done by end of August,	
<input type="checkbox"/>	opening of RFQ	Han/Vince	measurements done, delayed because of CV works, could be shifted to beginning of 2014	
<input type="checkbox"/>	amplifier tests	Han	complete test by March 2014, installation by June 2014	
A.O.B.				
<input type="checkbox"/>	order of new network analyzer	Han	use 69742 and 69748, presentation planned by the 2 companies,	
<input checked="" type="checkbox"/>		Frank	for the time being use consolidation budget for all LS1 work on the machines	6-Jun-13
<input type="checkbox"/>	2 months of ampl. testing Feb. to April 2014, needs organising meeting with involved groups,			
<input type="checkbox"/>	commissioning of FESA class in Linac2			