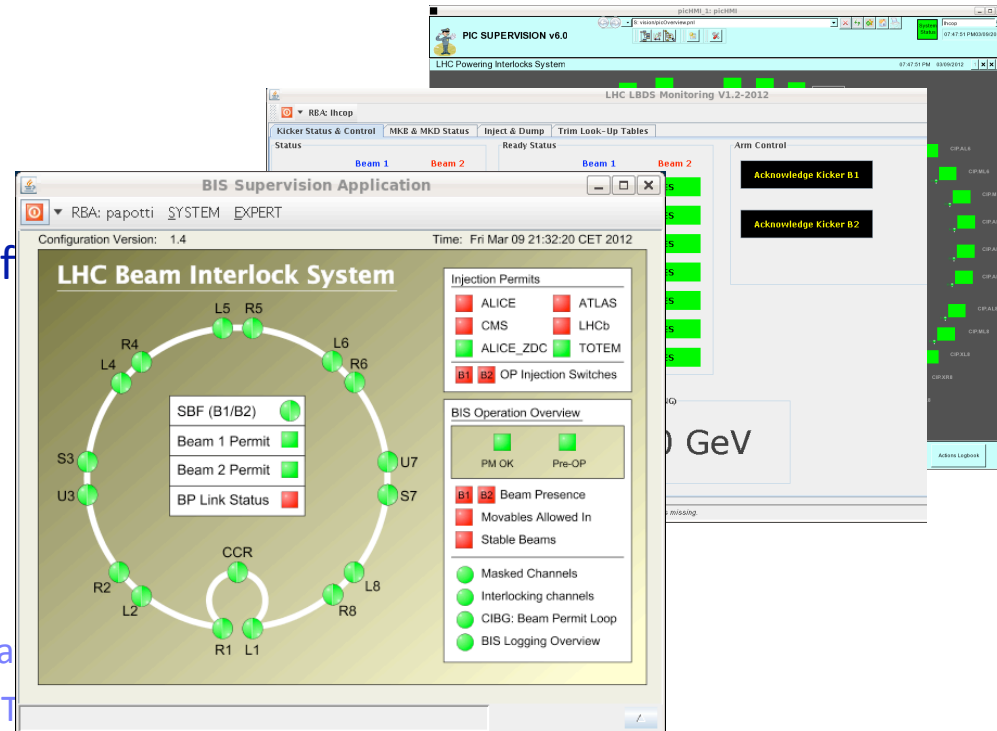# LHC Machine check out

R.Giachino / M.Albert   Be/op   10th March 2012

1v1

- 17:30 Ring access finished

- 18:00 Cryo 78 back ON

- 18:45 Exp's access finished

- 18:50 LHCb Injection inhibit problem f

- 19:00 Machine closed.

- 19:35 ALFA: End of interlock test.
  - Minor firmware update needed.
  - Test will done tomorrow.

- 20:33 All PCs are at injection
  - RPLB.RR17.RCBYVS4.R1B1 tripped shortly a
    - NO_PC_PERMIT VS_FAULT VS_EXTINT

- 20:49 Machine at injection, BEM armed by Nicolas, XPOC also.

- 21:30 **Bis loop closed!!**

- 21:45 Ramp all sector
  - RQTF RQTD ref mismatch
  - We start the ramp only for the triplet R2 and remove all the other in case the settings are still not good
  - **RCBV27R4B1 communication lost**.

- Bets tracking tests

- 24:00 Provoked fault on RD34.LR3 & RD34.LR7 (PIC tests) (EquipState, FGC.FAULTS->FGC_STATE)

- Finished off BETS tests @ 4TeV – all ok

- **Ramp-down of all PCs including IT.R2 and IT.L5**
  - but without : RCS/O/D, RQTD/F, ITs in all other sectors

- BETS test @ 450GeV – all looks ok but needs to be confirmed by Etienne

- Ramp of all PCs except RCS/O/D, RQTD/F but with all Its
  - we could not load the ramp for the RF due to a ref mismatch error on the ACSCA.XXX.VOLTAGE_I

- SQUEEZE functions couldn't be loaded due to REF MISMATCH for chromaticity sextupoles and orbit correctors; incorporated ORBIT-H/V into SQUEEZE

- Launched SQUEEZE without chromaticity sextupoles and RQT13.L8B1 (out of acceleration limits)

- Unable to load ramp-down function on RD34.LR3 because LIMITS.OP.I.MIN of RD34.LR3 is set to 40A while the min. current of the precycle function is 18A !

- Unable to load precycle[START]/precycle - settings for RD34.LR3/7 because IREF-settings have not been generated yet

- Executed PRECYCLE (without RD34.LR3/7 and RCBV27.R4B1) which finished successfully

- **Radiation veto after machine closed !!!**
- **Access system**
  - **PAD problem PM25**
  - **Possible intervention Monday morning**
- **Alfa**
  - **Monday morning Point 1**
- **Cooling and ventilation finished**
- **R2E**
  - **Monday morning TX76 1Hr**
- X ray 2 & 8
  - Monday afternoon point 8
  - Tuesday morning point 2

FRI 9	20:00	1	Vac	Vacuum system operational	opening vacuum valves
FRI 9	20:00	6	BIS	BIS loop closed	Debugging with everything connected -
FRI 9	22:00	8	OP	LHC nominal sequence	all available circuits at 4 TeV
SAT 10	8:00	9	LBDS/MKI	BIS loop closed	LBDS & MKI tests
SAT 10	11:00	36	TL's	TI2 TI8 beam tests	Point 2/8 Alice/LHCb closed
SAT 10	11:00	6	OP/Timing	LHC request	start testing the LHC request
SAT 10	14:30	2	CMS	VIP visit	
SUN 11	8:00	9	LBDS/MKI	BIS loop closed	Debugging with everything connected - as prequisite, plus experiments, connection to beam dump etc
SUN 11	22:00	8	OP	Pre-cycle and full sequence tests	Power converters, collimators, RF, Injection, Beam Instrumentation
SUN 11	23:00		TL's	TI2 TI8 beam tests finished	Point 2/8 Alice/LHCb closed
MON 12	8:00	4	OP	Access / RP!!	where is needed
MON 12	12:00	4	RP	Access XRAY	8R UJ87
MON 12	17:00	6	op/exps	Handshakes tests	Handshakes signals/SMP/...
MON 12	20:00	12	OP	Full machine tests	PC's, collimators,RF,Injection,BI
TUE 13	8:00	4	RP	Access XRAY	2L UJ23
TUE 13	12:00	12	OP	Setting UP	Full machine