

VSC Follow-up meeting 3rd of August 2020

LHC Machine Experimental Beam Vacuum Project

On behalf of the experimental team
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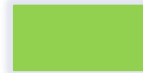
LS2



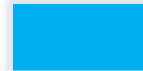
Installation schedule – main activities

LHC Experimental Vacuum - UX activities							
July							
Week	M	T	W	T	F	S	S
27			1	2	3	4	5
28	6	7	8	9	10	11	12
29	13	14	15	16	17	18	19
30	20	21	22	23	24	25	26
31	27	28	29	30	31		
August							
Week	M	T	W	T	F	S	S
31						1	2
32	3	4	5	6	7	8	9
33	10	11	12	13	14	15	16
34	17	18	19	20	21	22	23
35	24	25	26	27	28	29	30
36	31						
September							
Week	M	T	W	T	F	S	S
36		1	2	3	4	5	6
37	7	8	9	10	11	12	13
38	14	15	16	17	18	19	20
39	21	22	23	24	25	26	27
40	28	29	30				
October							
Week	M	T	W	T	F	S	S
40				1	2	3	4
41	5	6	7	8	9	10	11
42	12	13	14	15	16	17	18
43	19	20	21	22	23	24	25
44	26	27	28	29	30	31	

Schedule for 2020 activities is still drifting.



LHCb UX85 activities



ALICE UX25 activities

Week 32 – SMOG2 installation;

From week 33 – VELO vacuum system reinstallation and control system tests (possible whole Q4);

Week 38 – 40 – ALICE IP2. X MECA;
Week 40 – 41 – Bake-out of the IP2.X;
 A1R2.X; Neon venting after BO.

Week 43 – ALICE post-mechanical activities.

UX activities in past 4 weeks

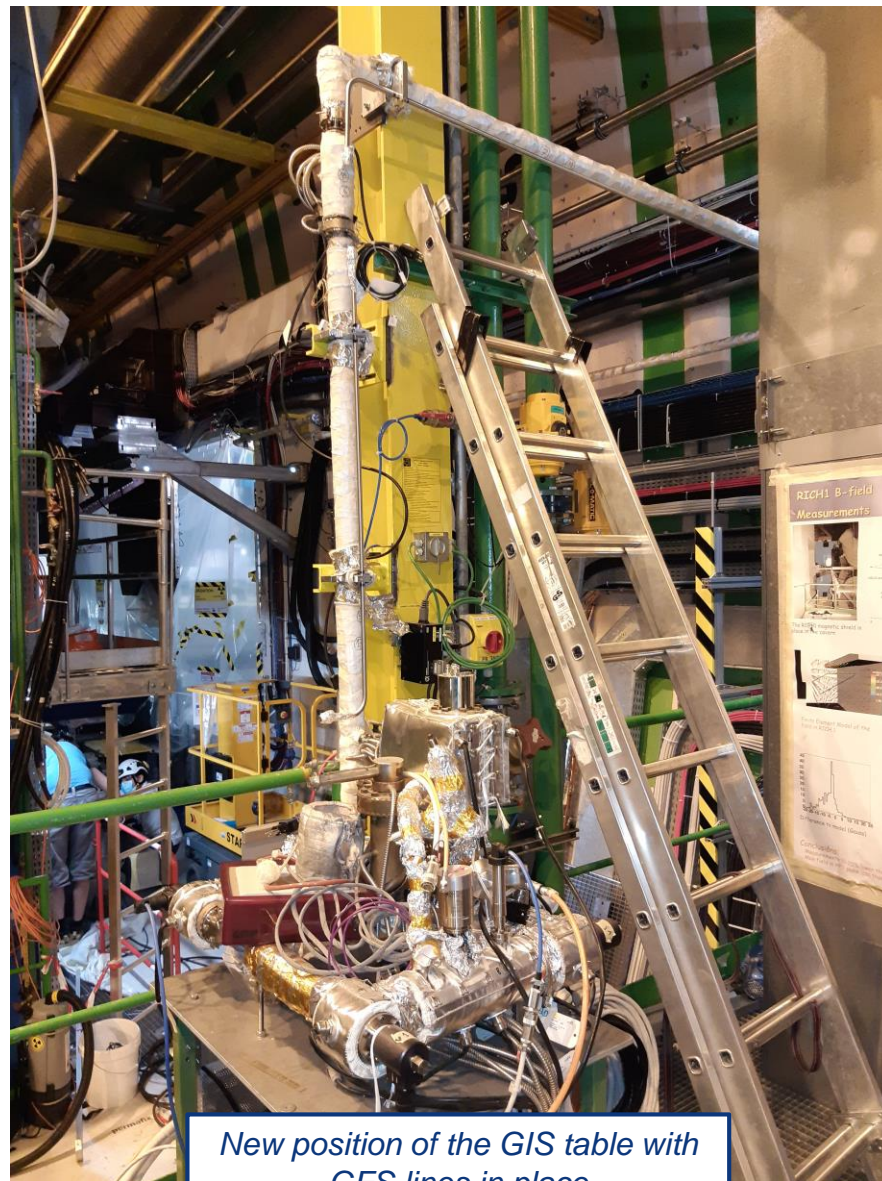
- **LHCb – VELO & SMOG2** preparations;
 - Modification of the existing GIS line routing;
(requested by the LHCb due to the conflict with new cooling infrastructure)
 - Modification of the GIS table (to integrate the GFS SMOG2 injection system);
 - Integration test of the GFS lines (before final installation);
- **ALICE** – installation of the new sector valve in RB26 (activity ongoing);



GIS line before the movement



Supports before the displacement



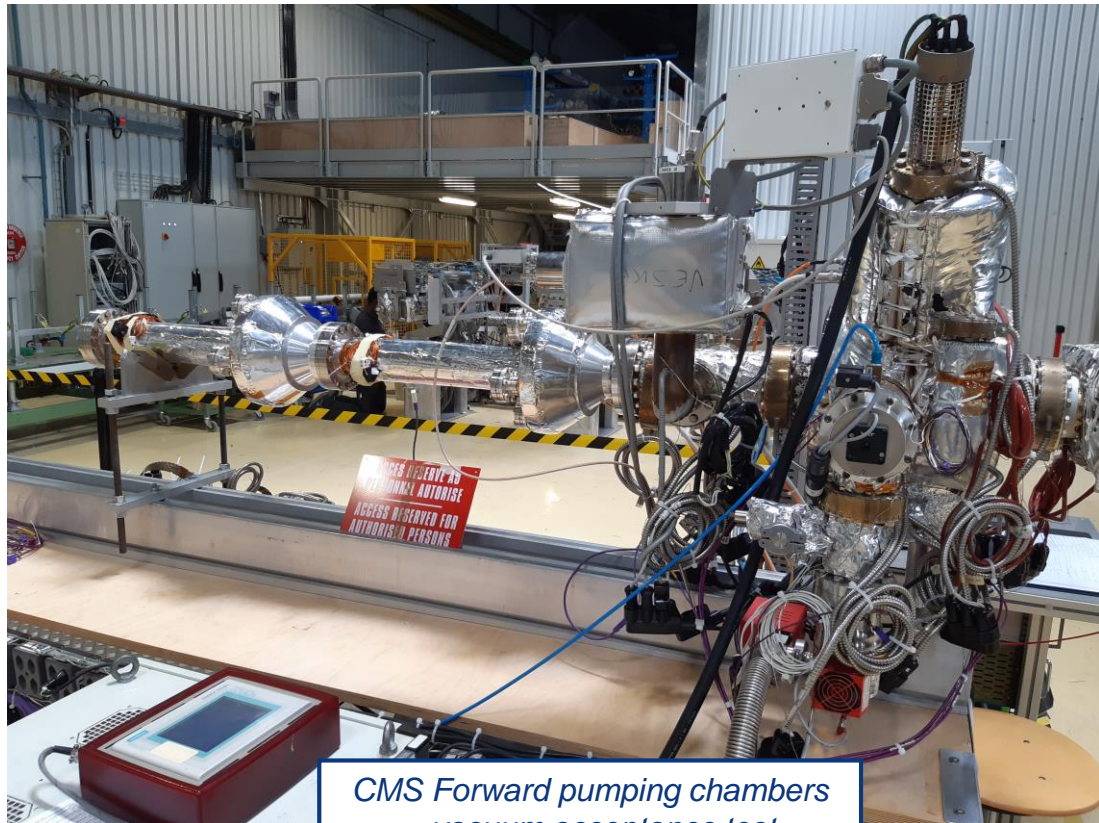
*New position of the GIS table with
GFS lines in place*

Lab activities in past 4 weeks

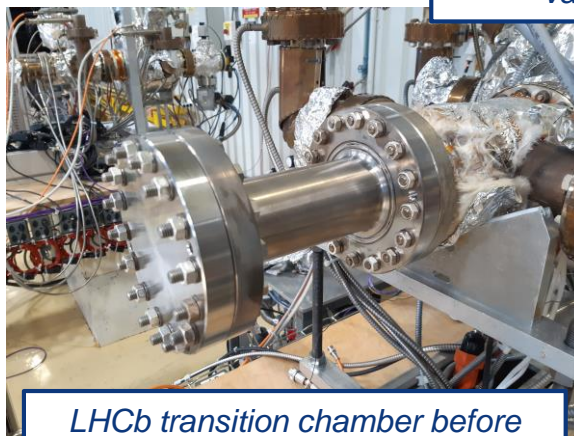
- Acceptance tests of the CMS central chamber after NEG coating;
 - NEG performance OK;
 - No signs of the peel-off (endoscopy performed);
 - Surface spots NC shows no evolution nor peel-off;
- NEG coating of the CMS Forward pumping chamber (2x);
- NEG coating of the LHCb transition chamber;
- Additional etching treatment step (before the NEG coating) performed on the CMS HF-CT2;
- First functional tests of CERN modified ACP28 for remote application within the LHCb.



CMS central chamber – NEG acceptance test



CMS Forward pumping chambers – vacuum acceptance test



LHCb transition chamber before the NEG coating



CMS HF-CT2 chamber before the surface treatment

Foreseen activities in next two weeks

- **Experimental cavern activities**
 - **LHCb UX85**
 - SMOG 2 installation;
 - VELO closing and reinstallation of the vac system;
 - **ALICE UX25**
 - Installation of the new sector valve in RB26;
 - VIC for the Central zone Re-installation;
 - **CMS UX55**
 - Inspection of cable routing (probably postponed);

Foreseen activities in next two weeks

- **Laboratory activities**

- CMS experimental chambers
 - NEG acceptance of 2x Forward pumping chamber
 - Endoscopy of the HF-CT2 after etching;
 - Vacuum acceptance of the HF-CT2 before NEG
 - NEG coating of the HF-CT2;
- LHCb experimental equipment
 - Functional tests of the ACP28 remote;
 - Installation readiness audit for the VELO reinstallation;



Thank you for your attention and help