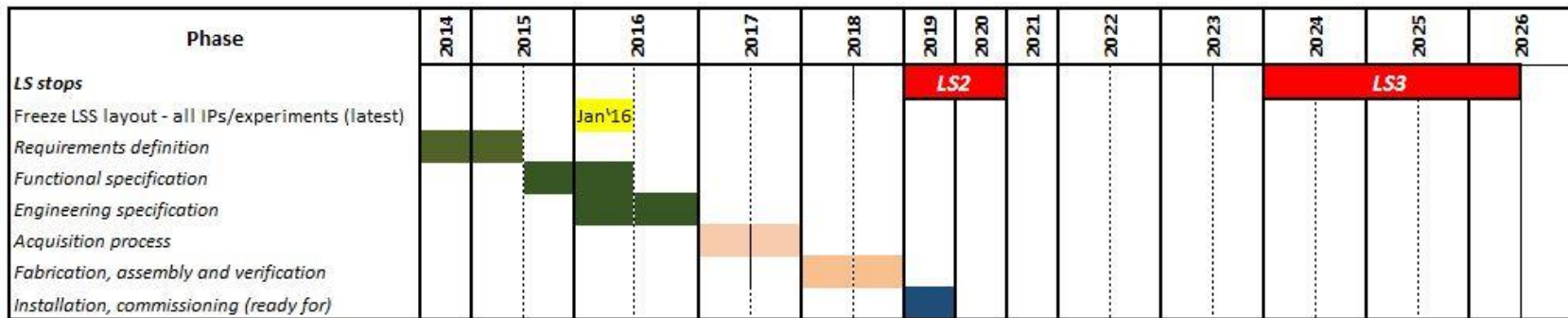




News WP8 February 2016

Re-baselining of WP8 (will include mask at P8 and shielding modifications at P1 and P5)



BPM re-positioning in Q1 seems promising

TAXS. Last valve weak link, specifications, alignment tolerances & other design concepts.

Updated on special warm to cold transition possibilities for Q1 [M.Sitko slides](#)

- 1) Results show that the option of reducing thermal shield works; so BPM could be moved by 200mm towards IP. BPM would become “visible” mostly everywhere.
- 2) Decision to be taken in the next 2-3 weeks
- 3) **V.Parma** says that the temperature chosen should be increased by ~20 °C
- 4) **P.Fessia** asks if it could be possible to reduce the cryostat diameter after the flange. He also asks to check the possibility to put back this flange as close as possible to cold feet, to free passing area.

BPM's centre point situated 686mm from end flange of cryostat

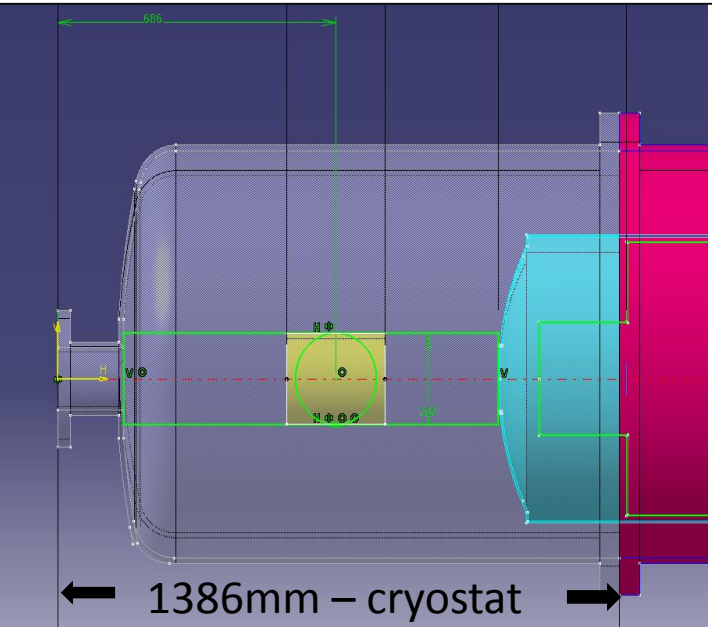
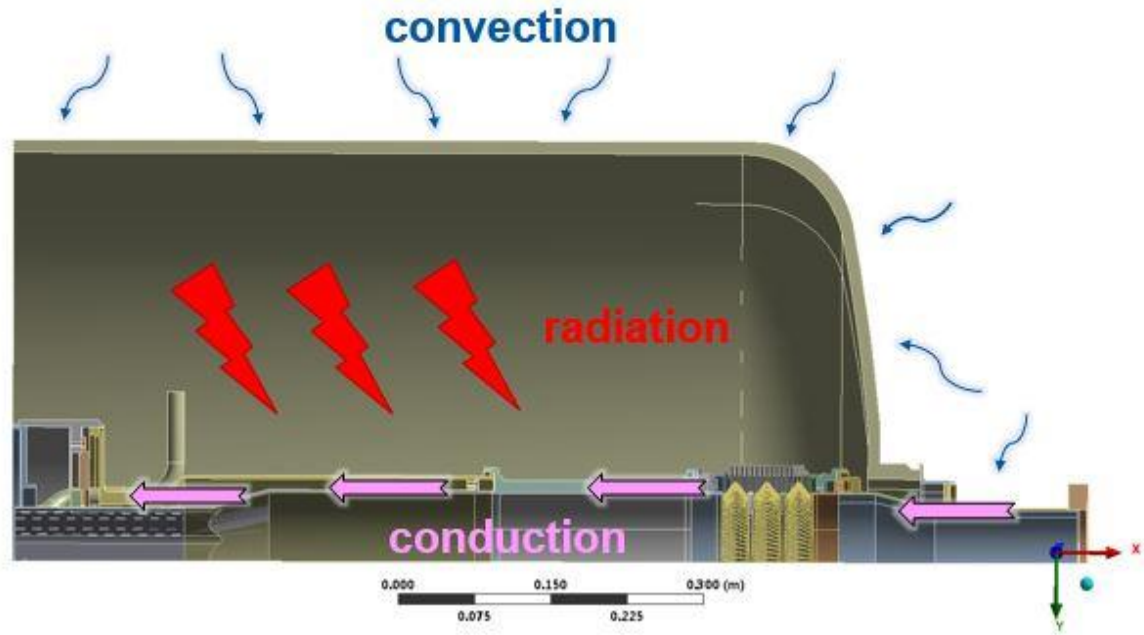


Fig.1 ST0539640 model

Heat transfer in CWT



M. Sitko, C. Garion, L. Krzempek
TE-VSC-DLM

Outstanding Issues

Mobile Cryo Plant in IR4:

- official approval missing

Q6 temperature confirmation:

- official approval missing

Finalizing Q1 BPM integration:

- finalize integration, valves positions → experiment approval

Beam-Beam:

- Validation of LRBB wire positions and alternative compensation via electron beams

Vacuum IR2 and IR8:

- Evaluate coating options for low SEY (**a-C is baseline**)

High lumi LHCb integration into HL-LHC

News WP8 February 2016

From: Lucio Rossi
Sent: 22 February 2016 12:21
To: Francisco Sanchez Galan <francisco.sanchez.galan@cern.ch>; Helmut Burkhardt <Helmut.Burkhardt@cern.ch>
Cc: Oliver Bruning <Oliver.Bruning@cern.ch>
Subject: comment from WP8

...

I send you a phrase from last Executive committee LIU/HL with a comment from Miguel concerning WP8, for your treatment.

...

“M.Jimenez commented that **in the VCX region the main risk is with fast longitudinal movements, which cannot be sustained by the supports of the beryllium vacuum chamber.** Mitigating this risk originating from the fragility of the support by a more solid design would avoid the venting of the chamber with Neon which is an issue during the commissioning period. F.Bordry confirmed that one should follow the ALARA principle for interventions in this region.

ACTION: WP8 of HL-LHC should discuss this topic and report to the HL-LHC TCC, after which a short summary report could be made at the EC.”

WP12 needs for gate valve specification (V.Baglin)

- Opening / aperture size & shape
- Volume / size availability
- Material specification
- Radiation level
- Stray magnetic field level
- RF screening yes/no