

Minutes of HSS meeting held on 4/3/2015

Presents: R. Bruce, L. Deniau, M. Fiascaris, M. Giovannozzi, J. Jowett, A. S. Langner, T. Mertens, D. Mirarchi, A. Rossi, G. Roy, A. Santamaria Garcia, M. Schaumann, R. Tomas, K. N. Sjobaek, G. Valentino, R. Wasef, F. Zimmermann.

- Report from meetings
 - General information (Massimo Giovannozzi)
 - The MD proposals for the LHC have been reviewed in an internal ABP meeting before the first LSWG meeting held on 2/3/2015.
 - The current OPT-MED optics for LHC in 2015 has been improved in terms of squeezability of IR1 and 5: solutions down to $\beta^*=25$ cm can be found in the official optics repository.
 - The dates of the sector test are confirmed for the weekend of 7-8 of March.
 - The generation of the error tables from WISE/FiDeL is being reviewed in order to cope with issues for the generated b_2 errors for magnets powered in circuits (as pointed out long ago by Stephane). A similar issues exists for b_1 errors in dipoles.
 - PS status and LIU studies (Simone Gilardoni)
 - Nothing to report
 - Collimation Status (Stefano Redaelli)
 - Nothing to report
 - MAD-X status (Laurent Deniau)
 - It has been reported that the convention for the beam emittance for different MAD-X modules is not uniform, e.g., normalised, unnormalised, 1σ , 2σ are all possible options. The situation will be reviewed in detailed and reported back a future HSS meeting.
 - SixTrack status (Riccardo De Maria)
 - Nothing to report
 - On-line model status (Piotr Skowronski)
 - Everything is almost ready for the forthcoming sector test, which will need the aperture meter up and running. Some components are still to be tests, due to availability of the control system.
- Main presentations
 - bv flag for crab cavities (Andrea Latina)
 - The presentation will be postponed to the next HSS meeting to allow for more in-depth analysis.
 - Alternative for the IR2 Nb3Sn magnet and cryo-collimator scheme. (Ions at 7 TeV – Post LS2) (Tom Mertens)
 - The proposal aims at installing a collimator in the interconnection cryostat in IR2, which, in combination with an appropriate orbit bump, could then be used to absorb the secondary beams generated by the lead-lead collisions in IP2.
 - The use of an additional orbit corrector installed in the same interconnection cryostat would increase the strength margin for the correctors involved in the bump generation. This is needed as these correctors would also be used for orbit correction.

- No showstoppers have been found so far and the proposed solution seems mature for discussions at higher level in the HL-LHC project.
- The computations performed so far should be confirmed using the official HLLHCV1.1 optics. Also, IR1 and 5 should be checked too.