

SESSION 4 - Systems 2 - Status and commissioning plans (HW perspective)

Transverse beam size measurement 20'

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Abstract

During the CERN's long shutdown (LS1), most of the profile monitors in the LHC went through a consolidation or refurbishment programme to cope with the increase of the machine top energy to 6.5 (and later 7)TeV. In fact the resulting adiabatic reduction of the transverse geometric beam emittance combined with the increased brightness delivered by the injectors will bring most of the beam size monitors close or even beyond their resolution limits.

In this paper we will summarize the upgrades/improvements carried out on the Wire Scanners (WS), Beam Gas Ionization (BGI) and the Synchrotron Radiation (BSRT) monitors. This will allow discussing the expected performances and limits of the beam size measurements at top energy.