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## Readout electronics and test bench for the CMS Phase I pixel detector

The present CMS pixel detector will be replaced with an upgraded pixel system during the LHC extended technical stop in winter 2016/2017. The CMS Phase 1 pixel upgrade combines a new pixel readout chip, which minimizes detection inefficiencies, with several other design improvements to maintain the excellent tracking performance of CMS at the higher luminosity conditions foreseen for the coming years. The upgraded detector features new readout electronics which require detailed evaluation. For this purpose a test stand has been setup, including a slice of the CMS pixel DAQ system, all components of the upgraded readout chain together with a number of detector modules. The test stand allows for detailed evaluation and verification of all detector components, and is also crucial to develop tests and procedures to be used during the detector assembly and the commissioning and calibration of the detector. In this talk the system test and its functionalities will be described with a focus on the tests performed for the barrel pixel detector. Furthermore, the assembly and integration of the readout electronics for the final detector system will be presented.

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