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【306】 CMS ECAL on-detector readout electronics radiation tests

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In preparation of the operation of the CMS electromagnetic calorimeter (ECAL) barrel at the High Luminosity Large Hadron Collider (HL-LHC) the entire on-detector electronics will be replaced. The new readout electronic comprises 12240 very front end (VFE), 2448 front end (FE) and low voltage regulator (LVR) cards arranged into readout towers (RTs) of five VFE, one FE and one LVR cards. The results of testing one RT of final prototype cards at CERN's CHARM mixed field facility and PSI's proton irradiation facilities are presented. They demonstrate the proper functioning of the new electronics in the expected radiation conditions.

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