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Performance and calibration of CASTOR calorimeter at CMS.

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CASTOR (Centauro And Strange Object Research) is a Cerenkov quartz-tungsten sampling calorimeter installed in the very forward region of the CMS experiment covering the pseudorapidity range of -5.2 to -6.6. The location of CASTOR and current geometry of the shielding imply operation under relatively high radiation dose and magnetic field. Except for very particular regions, the calorimeter read-out with fine mesh PMTs demonstrates good performance under these rough conditions.

First steps in the relative calibration of CASTOR is done using beam halo muons. To obtain relevant data, a dedicated CASTOR trigger was developed and activated during beam injections and ramp-ups. The triggered events correspond to an isolated particle penetrating the calorimeter along the beam axis. Analysis of the obtained spectra provides relative response to a muon per an individual read-out channel.

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