

The Beam Conditions Monitor of the LHCb Experiment

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The LHCb experiment at the European Organization for Nuclear Research (CERN) is dedicated to precision measurements of CP violation and rare decays of B hadrons. Its most sensitive components are protected by means of a Beam Conditions Monitor (BCM), based on polycrystalline CVD diamond sensors. Its configuration, operation and decision logics to issue or remove the beam permit signal for the Large Hadron Collider (LHC) are described in this paper.

Comments: Index Terms: Accelerator measurement systems, CVD, Diamond, Radiation detectors

Subjects: **Instrumentation and Detectors (physics.ins-det)**; High Energy Physics - Experiment (hep-ex)

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