

## First results on cryogenic semiconductor detectors for advancing the LHC beam loss monitor

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One of the goals of LHC upgrade is the increase of the particle maximal energy. For that, the magnet coils of the collider should operate at higher current that requires advancing system for monitoring of the radiation environment in the vicinity of the coils. To fulfill the new requirements, the novel version of Beam Loss Monitor (BLMs) which should be radiation hard at cryogenic temperature and operate in the LHe bath at 1.7 K is under development at CERN in cooperation with Ioffe Physical-Technical Institute (St. Petersburg). We present recent results on test beam of silicon and diamond detectors at cryogenic temperature and expectations following from this test.

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