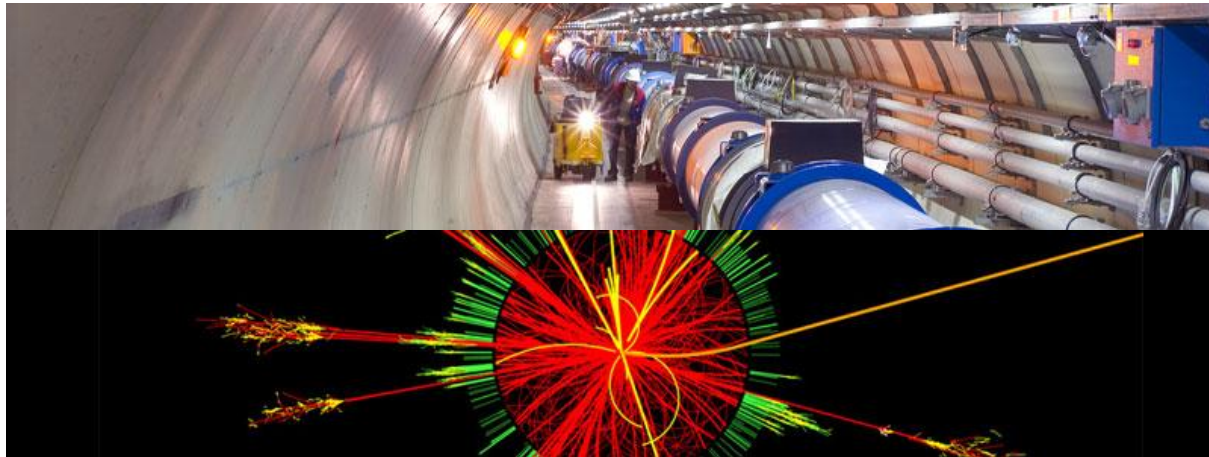




European Organization for Nuclear Research



The first CERN order to 'Necas A/S' comprises a series of 900 printed circuit boards for superconducting circuit protection in the Large Hadron Collider (LHC), CERN's flagship accelerator. The board type is a modified version of the quench detectors presently protecting the 2'100 superconducting busbars which interconnect the main dipole- and quadrupole magnets of the LHC. The Necas boards are intended for use in a specific campaign for verification of the continuity of the vital copper shunts across the 13 kA superconducting busbar joints, the so-called 'silent killers' because of their difficulty to unveil the presence of non-conformities prior to a quench of the joint.

CERN largely profited from the know-how and expertise of 'Necas A/S' as producer of boards of high grade quality and complexity. This reality led to a variety of suggestions for improvements and upgrades. Many of these were applied during the execution of the order, affecting the handling, the Q.A. application, the testing and the conditioning of the boards, which were all delivered on-time and to the full satisfaction of CERN.

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