## ACES 2020 - Seventh Common ATLAS CMS Electronics Workshop for LHC Upgrades



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## Reliability testing of a Low Voltage Power Supply(LVPS) and test station design for the Front-End Electronics of the ATLAS Tile Calorimeter

Thursday 28 May 2020 10:00 (30 minutes)

We present two test-station designs for testing the latest version of a switch-mode power supply for the front-end electronics of the ATLAS TileCal. The new test-station significantly improves fault detection and reliability. We further discuss the steps taken to test the new Tile-LVPS, using a custom-based software to perform tests and graphically display and record all performance metrics. The test-station verifies performance specifications laid out by TileCal and ensures protection against over-temperature, over-voltage and over-current. These test-stations will build upon the previous generation of testing-stations used in initial production of TileCal system and power next generation of upgraded LVPS hardware.

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