

Abstract Submitted
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Testing and Performance of Front-End Electronics for Micromegas Detectors for the ATLAS New Small Wheels NICHOLAS ANDRESS, University of Arizona, ATLAS COLLABORATION — The CERN ATLAS experiment, along the Large Hadron Collider (LHC), is receiving a significant upgrade for the upcoming Run 3. New muon detectors, sTGC and Micromegas, will be installed on New Small Wheels (NSWs) that are part of the ATLAS Muon Spectrometer. The NSW will improve the precision tracking and triggering of muons in the forward region at the higher luminosities expected for Run 3 and beyond. For the Micromegas detectors, 4096 front-end electronics, known as MMFE-8s, were built, tested, and installed on the NSWs. The methods of functional testing the MMFE-8s before installation are described and testing results are presented. Noise measurements and other performance results of the MMFE-8s after installation on NSW wedges are also shown.

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