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## New Small Wheel System Upgrade of the ATLAS experiment

*Thursday 6 April 2023 12:00 (30 minutes)*

The ATLAS collaboration at LHC has endorsed the resistive Micromegas technology, along with the small-strip Thin Gap Chambers (sTGC), for the high luminosity upgrade of the first muon station in the high-rapidity region, the so called New Small Wheel (NSW) project. After the R&D, the prototyping phase, the first series production Micromegas quadruplets have been constructed and the corresponding Electronics & readout boards at all involved construction sites: in France, Germany, Italy, Russia and Greece. Both Wheels have been installed and commissioned in the ATLAS cavern collecting data during run-3.

The long process of the creation of this complicated project of 2.5M channels will be presented.

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