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TIGER ASIC as a candidate front end electronics solution for future Straw Trackers

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A custom Application Specific Integrated Circuit (ASIC) TIGER (Turin Integrated Gem Electronics for Readout) is capable of simultaneous precise measurements of both the charge and time characteristics of signals in gaseous detectors. Flexibility of TIGER operation parameters makes it attractive to be evaluated as a front-end electronics solution for Straw-based Trackers of future High Energy and Neutrino Physics experiments.

We present first performance measurements done with Straw drift tubes operated with the TIGER-based readout. The results obtained with the SPS muon beam at CERN allows us to explore the advantages and limitations of the TIGER readout option for Straw tubes. An overview of possible further development is presented.

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