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Streaming Readout of the sPHENIX Tracking System

Monday 11 June 2018 14:20 (20 minutes)

The sPHENIX Collaboration at RHIC is upgrading the PHENIX detector in a way that will enable a comprehensive measurement of jets in relativistic heavy ion collisions. The upgrade will give the experiment full azimuthal coverage within a pseudorapidity range of $-1.1 < \eta < 1.1$.

Since the last conference, we have make significant progress with the readout of our calorimeters, which work with a “classic” triggered-event paradigm. At the same time, we have developed the prototype readout electronics for the Time Projection Chamber, which will operate in streaming, or trigger-less, readout mode. Most likely, another detector, our MAPS-based vertex detector (MVTX), will be read out in streaming mode as well.

We will present an overview of the DAQ system and the choices and current status of the readout electronics, firmware, and software components, especially with the streaming readout of the TPC.

Minioral

Yes

Description

streaming readout

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