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## Jefferson Lab streaming readout system

*Tuesday 23 April 2024 09:40 (20 minutes)*

Streaming readout is becoming a paradigm in data acquisition. Future experiments in HEP (e.g. hi-lumi upgrades at CERN) and NP (e.g. SOLID at JLab and ePIC at BNL) already opted for a modern triggerless DAQ that provides unprecedented possibilities in collecting an unbiased data set, include (quasi) real-time data processing based on sophisticated AI-supported algorithms, and shortening the time between data collection and physics observables extraction. Jefferson Lab, with four experimental halls fully engaged in the 12 GeV scientific program, offers the unique opportunity to test SRO solutions at the intensity frontier shaping tomorrow's experiment DAQ pipelines.

In this contribution, I will report the current efforts at Jefferson Lab to deploy an SRO system based on micro-services as well as the results of on-beam tests performed to validate the different components and profile performance of the whole system. Plans to use the current CLAS12 experiment as a test bed of JLab SRO DAQ will also be discussed.

### Minioral

No

### IEEE Member

No

### Are you a student?

No

**Author:** BATTAGLIERI, Marco (INFN-GE)

**Presenter:** BATTAGLIERI, Marco (INFN-GE)

**Session Classification:** Invited Talk, Oral and mini Oral presentations

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