



Contribution ID: 173

Type: **Oral presentation**

## **FERS-5200: a distributed Front-End Readout System for multidetector arrays**

*Tuesday 23 April 2024 17:00 (20 minutes)*

The FERS-5200 is the new CAEN Front-End Readout System, answering the challenging requirement to provide flexibility and cost-effectiveness in the readout of huge detector arrays. FERS-5200 is a distributed and easy-deployable platform integrating the whole readout chain of the experiment, from detector front-end to DAQ. It is based on compact ASIC-based front-end cards integrating A/D conversion and data processing, which can be ideally spread over a large detector volume without drawbacks on the readout performance. Synchronization, event building and DAQ is managed by a single Concentrator board, capable of sustaining thousands of readout channels. Using the appropriate Front-End, the solution perfectly fits a wide range of detectors such as SiPMs, multianode PMTs, GEMs, Silicon Strip detectors, Wire Chambers, Gas Tubes, etc, thus matching the requirements of different applications

### **Minioral**

Yes

### **IEEE Member**

No

### **Are you a student?**

No

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**Session Classification:** Oral presentations

**Track Classification:** Industry and Industry collaboration