## 24th IEEE Real Time Conference - ICISE, Quy Nhon, Vietnam



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

Authors: ABBA, Andrea (Nuclear Instruments SRL); Dr TINTORI, Carlo (CAEN SpA)

Co-authors: Dr VENARUZZO, Massimo (CAEN SpA); Dr PAOLI, Nicola (CAEN SPA); Dr GAROSI, Paola

(CAEN SPA); Mr VENTURINI, Yuri (CAEN SpA)

Presenter: Dr TINTORI, Carlo (CAEN SpA)Session Classification: Oral presentations

Track Classification: Industry and Industry collaboration