Contribution ID: **81** Type: **Oral Presentation**

The Data Acquisition System of the ECCE Detector at the Future Electron-Ion Collider

Wednesday 3 August 2022 12:10 (20 minutes)

The Electron-Ion Collider (EIC) is an extraordinary new facility enabling frontier research in nuclear physics, with initial operation planned for 2031. It is the largest single project undertaken by the US DOE Office of Nuclear Physics and, as such, represents a landmark allocation of resources. Recently, the proposal of the ECCE consortium has been selected as the reference design for "Detector 1"at the EIC. The central barrel of the detector incorporates the 1.4 T BaBar superconducting solenoid and the sPHENIX barrel hadronic calorimeter currently under construction.
We will give an overview of the ECCE detector, and detail a number of key points from the proposed electronics and data acquisition technologies to be developed or adapted. We will present the current plan of acquiring and storing the data, and preparing them for analysis.

Minioral

Yes

IEEE Member

Yes

Are you a student?

No

Author: PURSCHKE, Martin L (Brookhaven National Laboratory (US))

Presenter: PURSCHKE, Martin L (Brookhaven National Laboratory (US))

Session Classification: DAQ System & Trigger - III

Track Classification: Data Acquisition System Architectures