Accelerator and Detector Control: Introduction

Thomas Britton (JLab) and Benjamin Nachman (LBNL)

Topics

1. **Data Quality**
   a. **Anomaly detection**
2. **Online Calibration and Analysis**
   a. **Low-level calibrations (readout level and earlier)**
   b. **High-level calibrations (composite objects)**
   c. **Real time analysis**
3. **Trigger**
   a. **Rate control and allocation**
   b. **ML in the trigger**
   c. **Optimizing triggers**
4. **Accelerator / Detector Feedback**

Day 3 morning

Conveners: Benjamin Nachman, Thomas Britton (JLab)

10:00   **Accelerator and Detector Control: Introduction**

Speakers: Benjamin Nachman, Thomas Britton (JLab)

10:05   **Anomaly detection/Online data quality monitoring**

Speaker: Kishansingh Rajput (JLab)

10:27   **Online low-level calibration and operational conditions**

Speaker: Torri Jeske (JLab)

10:49   **Online high-level calibration and analysis**

Speaker: Mike Williams (MIT)

11:15   break

11:30   **Trigger rate control and allocation**

Speaker: David Miller (University of Chicago)

11:52   **Machine Learning in trigger deployment**

Speaker: Nhan Tran (Fermilab)

12:14   **Accelerator control**

Speaker: Aurelee Edelen (SLAC)

12:36   **Discussion**

Live notes:

https://docs.google.com/document/d/1 8-IHRK43APHDOUhpXW74VRvu4tD 4zBhqyqQ7VmT13z0/edit