# CPAD Instrumentation Frontier Workshop 2021

# Thursday, 18 March 2021

### TDAQ (12:00 - 13:40)

  -Conveners: Isobel Ojalvo; Georgia Karagiorgi

| time | [id] title | presenter |
|---|---|---|
| 12:00 | [15] Mu2e TDAQ and slow control systems | GIOIOSA, Antonio |
| 12:20 | [14] Development of the Mu2e electromagnetic calorimeter front-end and readout electronics | SPINELLA, Franco<br>SPINELLA, franco<br>SPINELLA, Franco |
| 12:40 | [46] Does anybody really know the time it is? | RUSACK, Roger |
| 13:00 | [211] FELIX: the Detector Interface for the ATLAS Experiment at CERN | PARAMONOV, Alexander |
| 13:20 | [213] The Expandable Modular ATCA hardware design for high-energy physics experiment applications | MADORSKY, Alexander |

### TDAQ (14:00 - 16:00)

  -Conveners: Isobel Ojalvo; Georgia Karagiorgi

| time | [id] title | presenter |
|---|---|---|
| 14:00 | [218] Liquid Argon Time Projection Chamber Trigger Development with MicroBooNE and SBND | KALRA, Daisy<br>KALRA, Daisy |
| 14:20 | [145] Trigger and Data Acquisition for the Mu2e-II experiment | BONVENTRE, Richard<br>BONVENTRE, Richard |
| 14:40 | [162] Streaming data acquisition system for CLAS12 Forward Tagger | BONDI', Mariangela |
| 15:00 | [209] Designing a 30 MHz GPU trigger, the LHCb experience | GLIGOROV, Vladimir |
| 15:20 | [158] Detector design for a Muon Collider experiment | JINDARIANI, Sergo |

# Friday, 19 March 2021

### TDAQ (12:00 - 13:40)

-Conveners: Georgia Karagiorgi; Isobel Ojalvo

| time | [id] title | presenter |
|------|-----------|-----------|
| 12:00 | [210] Real-time analysis in Run 3 with the LHCb experiment | VESTERINEN, Mika |
| 12:20 | [212] Towards an Interpretable Data-driven Trigger System for High-Throughput Physics Facilities | MILLER, David |
| 12:40 | [215] Global Trigger for the ATLAS Phase-II upgrade | HEINRICH, Jochen |
| 13:00 | [114] The Challenges of Machine Learning at the Edge | CORBEIL THERRIEN, Audrey |
| 13:20 | [219] Coprocessors as aservice for accelerated inference of DL algorithms | KRUPA, Jeffrey |

### TDAQ (14:00 - 15:10)

-Conveners: Georgia Karagiorgi; Isobel Ojalvo

| time | [id] title | presenter |
|------|-----------|-----------|
| 14:00 | [221] Triggering on Long-Lived Particles decaying to Hadronic Showers in CMS Muon System | KWOK, Ka hei martin |
| 14:20 | [214] Real-time Artificial Intelligence for Accelerator Control: A Study at the Fermilab Booster | HERWIG, Christian |
| 14:40 | [220] hls4ml: enabling real-time deep learning in HEP trigger and DAQ systems | NGADIUBA, Jennifer NGADIUBA, Jennifer |