

## **Session Program**

**Jan 22 - 23, 2020**



# **CERN openlab Technical Workshop**

## ***Computing Architectures for ML, Data Acquisition and Processing***

CERN, 503/1-001 - Council Chamber

## Wed, January 22

10:30 AM

### Computing Architectures for ML, Data Acquisition and Processing: Part 1

**Session** | **Location:** CERN, 503/1-001 - Council Chamber

10:30 - 10:45 AM

#### FPGA-based Machine Learning Inference for CMS with the Micron Deep Learning Accelerator

**Speaker**

Thomas Owen James

10:45 - 11:00 AM

#### Prototyping of a DL-based Particle Identification System for the Dune Neutrino Detector

**Speaker**

Manuel Jesus Rodriguez Alonso

11:00 - 11:25 AM

#### Partner talk: Micron DLA

**Speaker**

Marko Vitez

11:25 - 11:40 AM

#### Data Analytics and IoT for Industrial Control Systems

**Speaker**

Filip Siroky

11:40 - 11:55 AM

#### WinCC Open Architecture Next Generation Archiver (NGA)

**Speaker**

Anthony Hennessey

11:55 AM - 12:10 PM

#### Fast deep neural network inference on FPGAs

**Speaker**

Sioni Paris Summers

12:10 - 12:25 PM

#### Neuromorphic Computing

**Speaker**

Dr Jean-Roch Vlimant

12:25 - 12:40 PM

#### Fast Simulation with GANs

**Speaker**

Sofia Vallecorsa

12:40 PM

## Thu, January 23

9:00 AM

### Computing Architectures for ML, Data Acquisition and Processing: Part 3

**Session** | **Location:** CERN, 503/1-001 - Council Chamber

9:00 – 9:25 AM **Partner talk: Intel OneAPI**

**Speaker**

Francisco Perez

9:25 – 9:40 AM **GPU Usage Status & Plans in ATLAS**

**Speaker**

Attila Krasznahorkay

9:40 – 9:50 AM **First experience of CMS reconstruction with OneAPI**

**Speaker**

Andrea Bocci

9:50 – 10:05 AM **DAQDB: a key-value store for data acquisition**

**Speaker**

Giovanna Lehmann Miotto

10:05 – 10:15 AM **Deep Learning for de-noising DUNE data on Power**

**Speaker**

Sofia Vallecorsa

10:15 – 10:30 AM **LHCb Machine Learning Challenges**

**Speaker**

Andrey Ustyuzhanin

10:30 AM