Session Program

10–14 Oct 2016

CHEP 2016 Conference, San Francisco, October 8-14, 2016

Track 1: Online Computing

San Francisco Marriott Marquis

Monday 10 October

11:00

Track 1: Online Computing: 1.1

Session | **Location:** San Francisco Mariott Marquis, GG A+B | **Convener:** Frank Winklmeier

11:00–11:15 **SND DAQ system evolution**

Speaker
Alexander Bogdanchikov

11:15–11:30
40-Gbps Data-Acquisition System for NectarCAM, a camera for the Medium Size Telescopes of the Cherenkov Telescope Array

11:30–11:45 **The ATLAS Level-1 Topological Trigger Performance in Run 2**

Speaker
Imma Riu

11:45–12:00 **ALICE HLT Run2 performance overview**

Speaker
Mikolaj Krzewicki

12:00–12:15
Improvements of the ALICE HLT data transport framework for LHC Run 2

Speaker
David Rohr

12:15–12:30 **Real-time analysis with the LHCb trigger in Run-II**

Speaker
Gerhard Raven

12:30

14:00

Track 1: Online Computing: 1.2

Session | **Location:** San Francisco Mariott Marquis, GG A+B | **Convener:** Gene Van Buren

14:00–14:15 **artdaq: DAQ Software Development Made Simple**

Speaker
John Freeman

14:15–14:30
Performance and evolution of the DAQ system of the CMS experiment for Run-2

Speaker
Remi Mommsen

14:30–14:45 **Support for Online Calibration in the ALICE HLT Framework**

Speaker
Mikolaj Krzewicki

14:45–15:00
Novel real-time alignment and calibration of the LHCb Detector in Run2

Speaker
Maurizio Martinelli

15:00–15:15
Continuous and fast calibration of the CMS experiment: design of the automated workflows and operational experience

Speaker
Piotr Karol Oramus

15:15–15:30
Status of the Calibration and Alignment Framework at the Belle II Experiment

15:30–15:45
Frameworks to monitor and predict resource usage in the ATLAS High Level Trigger

Speaker
Tim Martin

15:45–16:00 **New operator assistance features in the CMS Run Control System**

Speaker
Hannes Sakulin

16:00

Tuesday 11 October

11:00

Track 1: Online Computing: 1.3

Session | **Location:** San Francisco Mariott Marquis, Sierra A | **Convener:** Tim Martin

11:00–11:15 **The CMS Data Acquisition - Architectures for the Phase-2 Upgrade**

Speaker
Emilio Meschi

11:15–11:30
ATLAS Trigger and Data Acquisition Upgrades for High Luminosity LHC

Speaker
Simon George

11:30–11:45 **FELIX: the new detector readout system for the ATLAS experiment**

Speaker
Soo Ryu

11:45–12:00 **The detector read-out in ALICE during Run 3 and 4**

Speaker
Filippo Costa

12:00–12:15 **Online Data Compression in the ALICE O2 facility**

Speaker
Matthias Richter

12:15–12:30
The InfiniBand based Event Builder implementation for the LHCb upgrade

Speaker
Matteo Manzali

12:30

14:00

Track 1: Online Computing: 1.4

Session | **Location:** San Francisco Mariott Marquis, Sierra A | **Convener:** Simon George

14:00–14:15
Implementation of the ATLAS trigger within the ATLAS MultiThreaded Software Framework AthenaMT

Speaker
Benjamin Michael Wynne

14:15–14:30
The design of a fast Level 1 track trigger for the ATLAS High Luminosity Upgrade

Speaker
Benedict Allbrooke

14:30–14:45 **Track Finding in CMS for the Level-1 Trigger at the HL-LHC**

Speakers
Kristian Hahn, Marco Trovato

14:45–15:00

Reconstruction of Micropattern Detector Signals using Convolutional Neural Networks

Speaker
Mrs Lucie Flekova

15:00–15:15 **Online computing architecture for the CBM experiment at FAIR**

15:15–15:30

Realtime processing of LOFAR data for the detection of particles with the Moon

Speaker
Dr Tobias Winchen

15:30

Wednesday 12 October

11:15

Track 1: Online Computing: 1.5

Session | **Location:** San Francisco Mariott Marquis, Sierra A | **Convener:** Sylvain Chapeland

11:15–11:30

The Trigger and Data Acquisition System for the KM3NeT-Italy neutrino telescope

Speaker
Matteo Manzali

11:30–11:45

Development of DAQ Software for CULTASK Experiment

Speaker
Soohyung Lee

11:45–12:00

The LArIAT Experiment's Data Acquisition and Trigger System

Speaker
Dr William Badgett

12:00–12:15

Message Queues for Online Reconstruction on the Example of the PANDA Experiment

Speaker
Tobias Stockmanns

12:15–12:30

STAR Online Meta Data Collection Framework: Integration with the Pre-existing Controls Infrastructure

Speaker
Dmitry Arkhipkin

12:30–12:45

Optical follow-up of gravitational wave triggers with DECam

Speaker
Dr Kenneth Richard Herner

12:45–13:00

NaNet: a Configurable Network Interface Card for Trigger and DAQ Systems

Speaker
Alessandro Lonardo

13:00

Thursday 13 October

11:00

Track 1: Online Computing: 1.6

Session | **Location:** San Francisco Mariott Marquis, Sierra A | **Convener:** Christian Faerber

11:00–11:15

Multi-Threaded Algorithms for General purpose Graphics Processor Units in the ATLAS High Level Trigger

Speaker
Patricia Conde Muino

11:15–11:30

GPU-accelerated track reconstruction in the ALICE High Level Trigger

Speaker
David Rohr

11:30–11:45

Accelerated tracking using GPUs at CMS High Level Trigger for Run 3

Speaker
Mr Felice Pantaleo

11:45–12:00

Fast GPU Nearest Neighbors search algorithms for the CMS experiment at LHC

Speakers
Alessandro Degano, Felice Pantaleo

12:00–12:15

First experiences with a parallel architecture testbed in the LHCb trigger system

Speaker
Stefano Gallorini

12:15–12:30

LHCb Kalman Filter cross architectures studies

Speaker
Daniel Hugo Campora Perez

12:30

14:00

Track 1: Online Computing: 1.7

Session | **Location:** San Francisco Mariott Marquis, Sierra A | **Convener:** Jason Webb

14:00–14:15

Muon trigger for mobile phones

Speaker
Maxim Borisyak

14:15–14:30

Acceleration of Cherenkov angle reconstruction with the new Intel Xeon/FPGA compute platform for the particle identification in the LHCb Upgrade.

Speaker
Christian Faerber

14:30–14:45

HEP Track Finding with the Micron Automata Processor and Comparison with an FPGA-based Solution

Speaker
John Freeman

14:45–15:00
FPGA based data processing in the ALICE High-Level Trigger in LHC Run 2

Speaker
Heiko Engel

15:00–15:15
An artificial retina processor for track reconstruction at the full LHC crossing rate

Speaker
Simone Stracka

15:15–15:30
Numerical Optimization for Fast Track Finding Based on the Artificial Retina Algorithm

Speaker
Maxim Borisyak

15:30