

**Session Program**

**9-13 Jul 2018**

**CHEP 2018 Conference, Sofia, Bulgaria**

***T1 - Online computing***

Sofia, Bulgaria  
National Culture Palace, Boulevard "Bulgaria", 1463 NDK, Sofia, Bulgaria

# Monday 9 July

11:00

## T1 - Online computing: S1

**Session** | **Location:** National Palace of Culture, Hall 3.1 | **Convener:** Adriana Telesca

11:00-11:15

### The ToolDAQ DAQ software Framework and its use in the Hyper-K, E61 & ANNIE detectors

**Speaker**

Dr Benjamin Richards

11:15-11:30

### The Continuously Running iFDAQ of the COMPASS Experiment

**Speaker**

Ondrej Subrt

11:30-11:45

### The Data acquisition system of the NA62 experiment at CERN

**Speaker**

Mr Marco Boretto

11:45-12:00

### Experience with Shifter Assistant: an intelligent tool to help operations of ATLAS TDAQ system in LHC Run 2

**Speaker**

Andrei Kazarov

12:00-12:15

### Operational experience with the new CMS DAQ expert

**Speaker**

Dr Hannes Sakulin

12:15-12:30

### Software-based data acquisition system for Level-1 end-cap muon trigger in ATLAS Run-3

**Speaker**

Kosuke Takeda

12:30

14:00

## T1 - Online computing: S2

**Session** | **Location:** National Palace of Culture, Hall 3.1 | **Convener:** Clara Gaspar

14:00-14:15

### LHCb MiniDAQ Control System

**Speaker**

Luis Granado Cardoso

14:15-14:30

### A Web-based control and monitoring system for DAQ applications

**Speaker**

Alexey Anisenkov

14:30-14:45

### The protoDUNE Single Phase Detector Control System

**Speaker**

Manuel Jesus Rodriguez Alonso

14:45-15:00

**Software based control and monitoring of a hardware based track reconstruction system for the ATLAS experiment**

**Speaker**

Simone Sottocornola

15:00-15:15

**Front-End Electronics Control and Monitoring for the LHCb Upgrade**

**Speaker**

Joao Vitor Viana Barbosa

15:15-15:30

**Status report on the architecture and future upgrades of the CMS Electromagnetic Calorimeter Control and Safety Systems**

**Speaker**

Mr Diogo Di Calafiori

15:30-15:45

**Towards the ALICE Online-Offline (O2) control system**

**Speaker**

Teo Mrnjavac

15:45-16:00

**The online DQM of BESIII**

**Speaker**

Xiaobin Ji

16:00

## Tuesday 10 July

11:00

### T1 - Online computing: S3

**Session** | **Location:** National Palace of Culture, Hall 3.1 | **Convener:** Ryosuke Itoh

11:00-11:15

#### Simultaneous usage of the LHCb HLT farm for Online and Offline processing workflows

**Speaker**

Joel Closier

11:15-11:30

#### Alignment and Calibration of the Belle II Detector

**Speaker**

Tadeas Bilka

11:30-11:45

#### Spy-Agency service for monitoring of automated real-time calibration workflows and steering the injection of prompt reconstruction workflows at the CMS experiment

**Speaker**

Arun Kumar

11:45-12:00

#### LHCb full-detector real-time alignment and calibration: latest developments and perspectives

**Speaker**

Chris Burr

12:00-12:15

#### Data handling in the ALICE O2 event processing

**Speaker**

Matthias Richter

12:15-12:30

#### Improving the use of data quality metadata via a partnership of technologies and resources between the CMS experiment at CERN and industry

**Speaker**

Virginia Azzolini

12:30

14:00

### T1 - Online computing: S4

**Session** | **Location:** National Palace of Culture, Hall 3.1 | **Convener:** Catrin Bernius

14:00-14:15

#### The design and performance of the ATLAS Inner Detector trigger in high pileup collisions at 13 TeV at the Large Hardon Collider

**Speaker**

Julie Hart Kirk

14:15-14:30

#### Kalman Filter track reconstruction on FPGAs for acceleration of the High Level Trigger of the CMS experiment at the HL-LHC

**Speaker**

Sioni Paris Summers

**14:30–14:45 Fast Kalman Filtering: new approaches for the LHCb upgrade****Speaker**

Placido Fernandez Declara

**14:45–15:00****Fast Boosted Decision Tree inference on FPGAs for triggering at the LHC****Speaker**

Sioni Paris Summers

**15:00–15:15****Comparison of Track Reconstruction Methods of the PANDA Experiment****Speaker**

Tobias Stockmanns

**15:15–15:30 ATLAS Hardware based track-finding: Present and Future****Speaker**

Todd Michael Seiss

**15:30–15:45****GPU-based Online Track Reconstructions for the ALICE TPC in Run 3 with Continuous Read Out****Speaker**

David Rohr

**15:45–16:00 Quantum Associative Memory in HEP Track Pattern Recognition****Speaker**

Illya Shapoval

16:00

# Wednesday 11 July

11:30

## T1 - Online computing: S5

**Session** | **Location:** National Palace of Culture, Hall 3.1 | **Convener:** Catrin Bernius

11:30-11:45 **The Belle II Online Reconstruction and Software Trigger**

**Speaker**

Thomas Hawth

11:45-12:00

**The ATLAS Trigger in 2017 - improvements, performance and challenges**

**Speaker**

Alex Christopher Martyniuk

12:00-12:15

**Event reconstruction of free-streaming data for the RICH detector in the CBM experiment**

**Speaker**

Dr Semen Lebedev

12:15-12:30

**Overview of the HL-LHC Upgrade for the CMS Level-1 Trigger**

**Speaker**

Rick Cavanaugh

12:30-12:45

**Implementation of the ATLAS trigger within the ATLAS Multi-Threaded Software Framework AthenaMT**

**Speaker**

Stewart Martin-Haugh

12:45-13:00

**A 30 MHz software trigger for the LHCb upgrade**

**Speaker**

Rosen Matev

13:00

# Thursday 12 July

11:00

## T1 - Online computing: S6

**Session** | **Location:** National Palace of Culture, Hall 3.1 | **Convener:** Ryosuke Itoh

11:00-11:15 **Readout software for the ALICE integrated Online-Offline (O2) system**

**Speaker**

Filippo Costa

11:15-11:30 **FELIX based readout of the Single-Phase ProtoDUNE detector**

**Speaker**

Enrico Gamberini

11:30-11:45 **The CMS event-builder system for LHC run 3 (2021-23)**

**Speaker**

Remi Mommsen

11:45-12:00

**The Design of a Distributed Key-Value Store for Petascale Hot Storage in Data Acquisition Systems**

**Speaker**

Dr Grzegorz Jereczek

12:00-12:15

**Data distribution and load balancing for the ALICE Online-Offline (O2) system**

**Speaker**

Gvozden Neskovic

12:15-12:30

**The NaNet Project: Real-time Distributed Heterogeneous Stream Processing for the NA62 Low Level Trigger**

**Speaker**

Alessandro Lonardo

12:30

14:00

## T1 - Online computing: S7

**Session** | **Location:** National Palace of Culture, Hall 3.1 | **Conveners:** Clara Gaspar, Adriana Telesca

14:00-14:15

**ALICE Overwatch: Online monitoring and data quality assurance using HLT data**

**Speaker**

Raymond Ehlers

14:15-14:30

**Highly extensible modular system for online monitoring of the ATLAS experiment**

**Speaker**

Serguei Kolos

14:30-14:45

**Presentation layer of CMS Online Monitoring System**

**Speaker**  
Mantas Stankevicius

14:45-15:00

**Open Hardware and Application Specific Design for the monitoring system of the Belle II forward/backward electromagnetic calorimeter**

**Speaker**  
Francesco Di Capua

15:00-15:15 **DAQBroker - A general purpose instrument monitoring framework**

**Speaker**  
Antonio Dias

15:15-15:30

**A scalable online monitoring system based on Elasticsearch for distributed data acquisition in CMS**

**Speaker**  
Dr Dainius Simelevicius

15:30