Conference on Computing in High Energy and Nuclear Physics

Monday 21 October 2024

Parallel (Track 2): Online and real-time computing - Room 1.C (Small Hall) (13:30 - 15:18)

-Conveners: Christina Agapopoulou

time	[id] title	presenter
13:30	[469] Performance of the LHCb heterogeneous software trigger	SCARABOTTO, Alessandro
13:48	[174] The ATLAS Trigger System	MERLASSINO, Claudia
14:06	[502] An optimized C++ software for the management of Timepix4 data acquisition and analysis	CAVALLINI, Viola
14:24	[453] The new hardware trigger processor at NA62 experiment: Status of the System and First Results	FREZZA, Ottorino FREZZA, Ottorino
14:42	[316] Implementation and development of a DAQ system DELILA at ELI-NP	Dr AOGAKI, Sohichiroh AOGAKI, Soichiro
15:00	[365] Reconstruction Framework Advancements for Streaming Readout for the ePIC Experiment at the EIC	JESKE, Torri

Parallel (Track 2): Online and real-time computing - Room 1.C (Small Hall) (16:15 - 18:03)

-Conveners: David Rohr

time	[id] title	presenter
16:15	[382] High-throughput data distribution for CBM online computing	DE CUVELAND, Jan
16:33	[162] Leveraging the Run 3 experience for the evolution of the ATLAS software-based readout towards HL-LHC	KOLOS, Serguei
16:51	[218] Architecting software applications in containerized environment for CMS data acquisition	SIMELEVICIUS, Dainius SIMELEVICIUS, Dainius
17:09	[406] A high-throughput input interface for the CBM FLES	HUTTER, Dirk
17:27	[170] Evolution of the ATLAS TDAQ online software framework towards Phase-II upgrade: use of Kubernetes as an orchestrator of the ATLAS Event Filter computing farm	CORSO RADU, Alina
17:45	[415] Overview of the data acquisition system architecture for the DarkSide-20k experiment	SABIA, Maria Adriana

Tuesday 22 October 2024

Parallel (Track 2): Online and real-time computing - Room 1.C (Small Hall) (13:30 - 15:18)

-Conveners: Kunihiro Nagano

time	[id] title	presenter
13:30	[344] Anomaly detection for data quality monitoring of the Muon system at CMS	BUONSANTE, Marco
13:48	[416] Hydra: An AI-Based Framework for Interpretable and Portable Data Quality Monitoring	SAWATZKY, Brad
14:06	[12] The automated Bandwidth Division for the LHCb first-level trigger	HORSWILL, Joshua Ethan
14:24	[311] ALICE Event Display - from the legacy ROOT-based visualization to the web-based application	MYRCHA, Julian
14:42	[464] A Comprehensive Bandwidth Testing Framework for the LHCb Upgrade Trigger System	HUNTER, Ross John

Parallel (Track 2): Online and real-time computing - Room 1.C (Small Hall) (16:15 - 18:03)

-Conveners: David Rohr

time	[id] title	presenter
16:15	[322] Downstream tracking and vertexing at the first stage of the LHCb trigger	JASHAL, Brij Kishor ZHUO, Jiahui
16:33	[506] Free-streaming online tracking in CBM	Dr GORBUNOV, Sergey
16:51	[325] BuSca: a Buffer Scanner at 30 MHz for New Long-Lived Particle Searches at LHCb	DE OYANGUREN CAMPOS, Arantza KHOLOIMOV, Valerii
17:09	[11] Online Electron Reconstruction at CLAS12	GAVALIAN, Gagik
17:27	[480] Data-driven efficiencies of the LHCb High Level Trigger in Run 3	GOODING, Jamie
17:45	[459] Machine learning based event reconstruction for the MUonE experiment	ZDYBAL, Milosz

Wednesday 23 October 2024

Parallel (Track 2): Online and real-time computing - Room 1.C (Small Hall) (13:30 - 15:18)

-Conveners: Kunihiro Nagano

time	[id] title	presenter
13:30	[301] A graph neural network based cosmic muon trigger for the Mu3e experiment	KARRES, David
13:48	[10] Charged Particle Track Reconstruction in CLAS12 using Artificial Intelligence	GAVALIAN, Gagik
14:06	[353] TrackNET: Deep Learning-Based Track Recognition in Pixel and Strip-Based Particle Detectors	Mr GONCHAROV, Pavel
14:24	[271] ML-Assisted Charged Particle Tracking at GlueX	JESKE, Torri
14:42	[123] Neural network clusterization for the ALICE TPC online computing	SONNABEND, Christian
15:00	[411] Machine Learning for Optimized Polarization at Jefferson Lab	JESKE, Torri

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-Conveners: Christina Agapopoulou

time	[id] title	presenter
16:15	[99] Improvements of the GPU Processing Framework for ALICE	ROHR, David
16:33	[163] GPU Acceleration and EDM Developments for the ATLAS 3D Calorimeter Clustering in the Software Trigger	DOS SANTOS FERNANDES, Nuno
16:51	[137] Low-latency AI for triggering on electrons at High Luminosity LHC with the CMS Level-1 hardware Trigger.	VISCONE, Piero
17:09	[375] Performance of the parallelized General Triplet Track Fit implemented on the GPU	NANDI, Abhirikshma
17:27	[515] An online GPU hit finder for the STS detector in the CBM experiment	WEIGLHOFER, Felix
17:45	[231] SYCL-based online data processing framework concept for PANDA	SOBOL, Bartosz

Thursday 24 October 2024

Parallel (Track 2): Online and real-time computing - Room 1.C (Small Hall) (13:30 - 15:18)

-Conveners: Christina Agapopoulou

time	[id] title	presenter
13:30	[166] Online track reconstruction with graph neural networks on FPGAs for the ATLAS experiment	DITTMEIER, Sebastian
13:48	[533] Real-time pattern recognition with FPGA at LHCb, an O(n) complexity architecture	LAZZARI, Federico
14:06	[149] Real-time Anomaly Detection at the L1 Trigger of CMS Experiment	QUINNAN, Melissa
14:24	[164] Development of an FPGA based track reconstruction pipeline for the ATLAS Event Filter	ABIDI, Haider
14:42	[496] FPGA-RICH: A low-latency, high-throughput online particle identification system for the NA62 experiment	PERTICAROLI, Pierpaolo
15:00	[32] Versal ACAP processing for ATLAS-TileCal signal reconstruction	HERVAS ALVAREZ, Francisco

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-Conveners: David Rohr

time	[id] title	presenter
16:15	[172] The upgrade of the ATLAS Trigger and Data Acquisition system for the High Luminosity LHC	VARI, Riccardo
16:33	[215] An online data processing system for the CMS Level-1 Trigger data scouting demonstrator	MIGLIORINI, Matteo
16:51	[384] The NextGen Triggers project: overview, plans and first actions	NAUMANN, Axel
17:09	[291] Real-time implementation of Artificial Intelligence compression algorithm for High-Speed Streaming Readout signals.	ROSSI, Fabio
17:27	[358] Use of topological correlations in ML-based conditions for the CMS Level-1 Global Trigger upgrade for the HL-LHC	BORTOLATO, Gabriele
17:45	[484] HIGH PERFORMANCE ALGORITHMS FOR LOW POWER SUSTAINABLE HARDWARE IN HEP AT VALENCIA	SVINTOZELSKYI, Volodymyr