

ICHEP 2024

Friday 19 July 2024

Computing and Data handling: Computing and Data handling - Club A (08:30 - 10:15)

-Conveners: Gavin Davies

time	[id] title	presenter
08:30	[162] Common Analysis Tools in CMS	NOVAK, Andrzej
08:47	[279] Improvements in ATLAS Computing for Run-3 of the LHC	SVATOS, Michal
09:04	[814] The Auger Offline Framework Software	NELLEN, Lukas
09:21	[837] Usage of GPUs for online and offline reconstruction in ALICE in Run 3	ROHR, David
09:38	[804] The Design and Development of the scientific data analysis software framework for High Energy Photon Source in China	HU, Yu
09:55	[59] The Design and Progress of the Network and Computing System for HEPS	HU, Hao

Computing and Data handling: Computing and Data handling - Club A (10:45 - 12:30)

-Conveners: Thea Aarrestad; Gavin Davies

time	[id] title	presenter
10:45	[864] DUNE trigger and data acquisition systems	DALLAWAY, William Gregory
11:02	[175] Overview of the HL-LHC Upgrade for the CMS Level-1 Trigger	SUMMERS, Sioni Paris
11:19	[1358] Intelligent experiments through real-time AI: Fast Data Processing and Autonomous Detector Control for sPHENIX and future EIC detectors	KVAPIL, Jakub
11:36	[791] The Data-Acquisition System and new GPU-based L3 of the KOTO Experiment	GONZALEZ, Mario
11:53	[743] Machine Learning for Real-Time Processing of ATLAS Liquid Argon Calorimeter Signals with FPGAs	SUR, Nairit
12:10	[1129] Realtime Anomaly Detection at the L1 Trigger of CMS Experiment	GANDRAKOTA, Abhijith

Computing and Data handling: Computing and Data handling - Club A (14:30 - 16:15)

-Conveners: Thea Aarrestad

time	[id] title	presenter
14:30	[1045] Applications of Lipschitz monotonic neural networks to the LHCb Run 3 trigger system	DELANEY, Blaise Raheem
14:47	[645] Quantum machine learning classifiers implemented on FPGA for ultra-low latency applications.	BORELLA, Lorenzo
15:04	[1280] Fast ML inference framework for real-time analysis at LHCb	VAN VEGHEL, Maarten
15:21	[211] Run 3 performance and advances in heavy flavor jet tagging in CMS	SARKAR, Uttiya
15:38	[539] Flavour Tagging with Graph Neural Network with the ATLAS Detector	DRAGUET, Maxence
15:55	[1174] Differentiable Vertex Fitting for Jet Flavour Tagging	OCHOA, Ines

Computing and Data handling: Computing and Data handling - Club A (16:45 - 18:30)**-Conveners: Fabio Catalano; Dagmar Adamova**

time	[id] title	presenter
16:45	[297] Tau lepton identification in displaced topologies using machine learning at CMS	SHCHEDROLOSIEV, Mykyta
17:02	[278] A geometric deep learning algorithm for charged-particle track reconstruction in the ATLAS ITk	PHAM, Minh-Tuan
17:19	[280] Studies on track finding algorithms based on machine learning with CPU, GPU and FPGA	CARNESALE, Maria
17:36	[1156] High-throughout GNN based track reconstruction on GPUs at LHCb	GIASEMIS, Fotis
17:53	[337] Charged particle tracking with quantum graph neural networks	ARGENTON, Matteo
18:10	[878] Quantum algorithms for track reconstruction at high energy colliders	OKAWA, Hideki

Saturday 20 July 2024

Computing and Data handling: Computing and Data handling - Club A (08:30 - 10:15)

-Conveners: Gavin Davies; James Catmore

time	[id] title	presenter
08:30	[165] Advancing neutrino interaction reconstruction: a deep learning strategy in highly-segmented dense detectors	Dr ALONSO MONSALVE, Saul
08:47	[1028] DUNE Far Detector Event Reconstruction with Pandora	CHAPPELL, Andrew
09:04	[1014] High level reconstruction with deep learning at ILD full simulation	SUEHARA, Taikan
09:21	[964] Reconstruction of multiple calorimetric clusters in the LHCf experiment with machine learning techniques	PIPARO, Giuseppe
09:38	[973] Enhancing Event Reconstruction for Hyper-Kamiokande's Water Cherenkov Detectors through Machine Learning	PROUSE, Nick
09:55	[1116] A palindrome: simultaneous high-dimensional calibration with differentiable simulation	CHEN, Yifan

Computing and Data handling: Computing and Data handling - Club A (10:45 - 12:30)

-Conveners: Gavin Davies; James Catmore

time	[id] title	presenter
10:45	[380] The ATLAS Monte Carlo detector simulation for Run 3 at the LHC	CHAPMAN, John Derek
11:02	[1298] Generative models and seq2seq techniques for the flash-simulation of the LHCb experiment	BARBETTI, Matteo
11:19	[379] The Fast Simulation Program of ATLAS at the LHC	JAVURKOVA, Martina
11:36	[1001] CEPC-on-Gaussino: an application of Gaussino simulation framework for CEPC experiment	LIN, Tao
11:53	[1285] Parallelizing particle track simulations in gas based charged particle detectors	MALHOTRA, Shivali
12:10	[385] Machine learning reweighting of MC parameters and MC samples of top quark production in CMS	GUGLIELMI, Valentina

Computing and Data handling: Computing and Data handling - Club A (14:30 - 16:15)

-Conveners: Gavin Davies; Fabio Catalano

time	[id] title	presenter
14:30	[163] Publishing full statistical models of CMS physics analyses	SEKMEN, Sezen
14:47	[1183] Automatic Differentiation in RooFit for fast and accurate likelihood fits	REMBSER, Jonas
15:04	[769] Enhancing CMS data analyses using a distributed high throughput platform	DIOTALEVI, Tommaso
15:21	[1110] New ways to access PDG data	BERINGER, Juerg
15:38	[1185] Five years of Key4hep - Towards production readiness and beyond	SASIKUMAR, Swathi
15:55	[739] Machine Learning-based Data Compression	GALLEN, Axel

Computing and Data handling: Computing and Data handling - Club A (16:45 - 18:30)**-Conveners: Dagmar Adamova; Fabio Catalano**

time	[id] title	presenter
16:45	[593] Overview of Machine Learning applications in JUNO	LUO, Wuming
17:02	[194] Explore new physics with advanced Machine Learning techniques at CMS	SOMMERHALDER, Manuel
17:19	[1065] AI-assisted design of experiments at the frontiers of computation: methods and new perspectives	Dr VISCHIA, Pietro
17:36	[789] Dr.Sai: Physical Analysis Agents based on LLMs for BESIII Experiment and Exploration of Future AI Scientist	ZHANG, Zhengde
17:53	[354] Tracker Data Quality Certification in CMS with new Machine Learning Tools	PATHAK, Atanu
18:10	[929] Playing the devil's advocate to bound hidden systematic uncertainties	HIJANO MENDIZABAL, Guillermo