

26TH INTERNATIONAL CONFERENCE ON COMPUTING IN HIGH ENERGY & NUCLEAR PHYSICS (CHEP2023)

Monday, May 8, 2023

Track 3 - Offline Computing: Reconstruction - Hampton Roads Ballroom VI (11:00 AM - 12:30 PM)

-Conveners: Marilena Bandieramonte; Norraphat Srpimanobhas

time	[id] title	presenter
11:00 AM	[174] Machine learning for ambiguity resolution in ACTS	ALLAIRE, Corentin
11:15 AM	[222] Generalizing mkFit and its Application to HL-LHC	TADEL, Matevz
11:30 AM	[382] traccc - a close to single-source track reconstruction demonstrator for CPU and GPU	KRASZNAHORKAY, Attila
11:45 AM	[387] GPU-based algorithms for primary vertex reconstruction at CMS	ERICE CID, Carlos Francisco
12:00 PM	[408] The Exa.TrkX Project	CALAFIURA, Paolo
12:15 PM	[430] Faster simulated track reconstruction in the ATLAS Fast Chain	Dr LEIGHT, William

Track 3 - Offline Computing: Physics performance (part I) - Hampton Roads Ballroom VI (2:00 PM - 3:30 PM)

-Conveners: Tingjun Yang; Norraphat Srpimanobhas

time	[id] title	presenter
2:00 PM	[165] Investigating mixed-precision for AGATA pulse-shape analysis	MOLINA, Roméo
2:15 PM	[279] Kiwaku, a C++20 library for multidimensional arrays, applied to ACTS tracking	Mr JOUBE, Sylvain
2:30 PM	[407] A physical dimensions aware evaluator for High Energy Physics applications	CLEMENCIC, Marco
2:45 PM	[421] Physics Performance of the ATLAS GNN4ITk Track Reconstruction Chain	JU, Xiangyang
3:00 PM	[489] Calibration Data Flow and Performance at Belle II	PRIM, Markus
3:15 PM	[552] EIC Software Overview	LAWRENCE, David

Tuesday, May 9, 2023**Track 3 - Offline Computing: Physics performance (part 2) - Hampton Roads Ballroom VI (11:00 AM - 12:30 PM)****-Conveners: Tingjun Yang; Norraphat Srpimanobhas**

time	[id] title	presenter
11:00 AM	[558] Algorithms: Framework- and Experiment-independent algorithms at EPIC	JOOSTEN, Sylvester
11:15 AM	[244] Performance of track reconstruction at STCF using ACTS	LI, Teng
11:30 AM	[510] Flexible, robust and minimal-overhead Event Data Model for track reconstruction in ACTS	Dr GESSINGER, Paul
11:45 AM	[484] Multithreading ATLAS offline software: a retrospective	SNYDER, Scott
12:00 PM	[554] Machine Learning Tools for the CMS Tracker Data Quality Monitoring and Certification	BENELLI, Gabriele

Track 3 - Offline Computing: Data preparation (part I) - Hampton Roads Ballroom VI (2:00 PM - 3:30 PM)**-Conveners: Marilena Bandieramonte; Norraphat Srpimanobhas**

time	[id] title	presenter
2:00 PM	[126] CMS Tier0 data processing during the detector commissioning in Run-3	AMADO, Jhonatan
2:15 PM	[176] JUNO Offline Software for Data Processing and Analysis	HUANG, Xingtao
2:30 PM	[217] Repurposing of the Run 2 CMS High Level Trigger Infrastructure as an Cloud Resource for Offline Computing	MASCHERONI, Marco
2:45 PM	[265] Offline Data Processing Software for the Super Tau Charm Facility	LI, Teng
3:00 PM	[281] Status of DUNE Offline Computing	KIRBY, Michael
3:15 PM	[264] DUNE Database Development	Dr VIZCAYA HERNANDEZ, Ana Paula

Track 3 - Offline Computing: Simulation (part 2) - Hampton Roads Ballroom VI (4:30 PM - 6:15 PM)**-Conveners: Tingjun Yang; Marilena Bandieramonte**

time	[id] title	presenter
4:30 PM	[249] EvtGen – recent developments and prospects	ABUDINÉN, Fernando
4:45 PM	[579] Introducing HIJING++: the Heavy Ion Monte Carlo Generator for the High-Luminosity LHC Era	KRASZNAHORKAY, Attila
5:00 PM	[66] Surface-based GPU-friendly geometry modeling for detector simulation	GHEATA, Andrei
5:15 PM	[163] Accelerated demonstrator of electromagnetic Particle Transport (AdePT) status and plans	GHEATA, Andrei
5:30 PM	[328] A parameter optimisation toolchain for Monte Carlo detector simulation	VOLKEL, Benedikt
5:45 PM	[352] Optimizing Geant4 Hadronic Model Parameters Through Global Fits to Thin Target Data	YARBA, Julia

Thursday, May 11, 2023**Track 3 - Offline Computing: Simulation (part 3) - Hampton Roads Ballroom VI (11:15 AM - 12:45 PM)****-Conveners: SOFIA VALLECORSIA; Marilena Bandieramonte**

time	[id] title	presenter
11:15 AM	[364] Analysis Tools in Geant4	HRIVNACOVA, Ivana
11:30 AM	[445] Geant4 electromagnetic physics for Run3 and Phase2 LHC	Dr SAWKEY, Daren
11:45 AM	[135] Refined drift chamber simulation in the CEPC experiment	Dr FANG, Wenxing
12:00 PM	[344] Simulation of the MoEDAL-MAPP experiment at the LHC	KALLIOKOSKI, Matti
12:15 PM	[428] Recent Developments in the FullSimLight Simulation Tool from ATLAS	Mr KHAN, Raees
12:30 PM	[438] Full Simulation of CMS for Run-3 and Phase-2	SRIMANOBHAS, Phat

Track 3 - Offline Computing: Data Preparation (part 2) - Hampton Roads Ballroom VI (2:00 PM - 3:30 PM)**-Conveners: Xavier Espinal; Tingjun Yang**

time	[id] title	presenter
2:00 PM	[403] Framework for custom event sample augmentations for ATLAS analysis data	VAN GEMMEREN, Peter
2:15 PM	[419] Optimizing ATLAS data storage: the impact of compression algorithms on ATLAS physics analysis data formats	Dr MARCON, Caterina
2:30 PM	[429] Towards a distributed heterogeneous task scheduler for the ATLAS offline software framework	ESSEIVA, Julien
2:45 PM	[506] Current Status and Future Developments for Automation of Data Calibration and Processing Procedures at the Belle II Experiment	DOSSETT, David
3:00 PM	[371] RenderCore – a new WebGPU-based rendering engine for ROOT-EVE	TADEL, Matevz
3:15 PM	[229] Potentiality of automatic parameter tuning suite available in ACTS track reconstruction software framework	GARG, rocky