

24th International Conference on Computing in High Energy & Nuclear Physics

Monday, November 4, 2019

Track 2 – Offline Computing: ML Reconstruction & PID - Riverbank R6 (11:00 AM - 12:30 PM)

-Conveners: Teng Jian Khoo

time	[id] title	presenter
11:00 AM	[507] A Graph Neural Network Approach for Neutrino Signal Reconstruction from LarTPC Raw Data	CARMINATI, Federico
11:15 AM	[33] Particle Reconstruction with Graph Networks for irregular detector geometries	PIERINI, Maurizio
11:30 AM	[31] Interaction networks for jet characterisation at the LHC	VLIMANT, Jean-Roch
11:45 AM	[446] A deep neural network method for analyzing the CMS High Granularity Calorimeter (HGCAL) events	GRASSEAU, Gilles
12:00 PM	[427] GRAAL: A novel package to reconstruct data of triple-GEM detectors	FARINELLI, Riccardo
12:15 PM	[416] Particle identification algorithms for the Panda Barrel DIRC	Dr DZHYGADLO, Roman

Track 2 – Offline Computing: ML and generative simulation - Riverbank R6 (2:00 PM - 3:30 PM)

-Conveners: Chiara Ilaria Rovelli

time	[id] title	presenter
2:00 PM	[306] Fast Simulations at LHCb	DAVIS, Adam
2:15 PM	[580] Fast simulation methods in ATLAS: from classical to generative models	RAINE, Johnny
2:30 PM	[398] Learning high-level structures in HEP data with novel Deep Auto-Regressive Networks for Fast Simulation	IFRIM, Ioana
2:45 PM	[492] Particle shower simulation in high granularity calorimeters using 3 dimensional convolutional Generative Adversarial Networks	BRITO DA ROCHA, Ricardo
3:00 PM	[295] Generative Adversarial Networks for LHCb Fast Simulation	RATNIKOV, Fedor
3:15 PM	[37] Generation of Belle II pixel detector background data with a GAN	KUHR, Thomas

Tuesday, November 5, 2019

Track 2 – Offline Computing: G4 and simulation frameworks - Riverbank R6 (11:00 AM - 12:30 PM)

-Conveners: Chris Pinkenburg

time	[id] title	presenter
11:00 AM	[539] Geant4 electromagnetic physics progress	HRIVNACOVA, Ivana
11:15 AM	[532] Dealing with High Background Rates in Simulations of the STAR Heavy Flavor Tracker	WEBB, Jason
11:30 AM	[423] A VecGeom navigator plugin for Geant4	WENZEL, Sandro Christian
11:45 AM	[69] Integration and Performance of New Technologies in the CMS Simulation	PEDRO, Kevin
12:00 PM	[141] Status of JUNO simulation software	Dr DENG, Ziyang
12:15 PM	[195] System simulations for the ALICE ITS detector upgrade	NESBO, Simon Voigt

Track 2 – Offline Computing: Lightweight simulation and optimisation - Riverbank R6 (2:00 PM - 3:30 PM)

-Conveners: Chris Pinkenburg

time	[id] title	presenter
2:00 PM	[285] Gaussino - a Gaudi-based core simulation framework	MULLER, Dominik
2:15 PM	[180] Geant4 performance optimization in the ATLAS experiment	MUSKINJA, Miha
2:30 PM	[226] FullSimLight: ATLAS standalone Geant4 simulation	BANDIERAMONTE, Marilena
2:45 PM	[546] The Heavy Photon Search Experiment Software Environment	GRAF, Norman Anthony
3:00 PM	[441] Selective background Monte Carlo simulation at Belle II	KAHN, James
3:15 PM	[224] Multithreaded simulation for ATLAS: challenges and validation strategy	BANDIERAMONTE, Marilena

Track 2 – Offline Computing: Cross-experiment frameworks & foundations - Riverbank R6 (4:30 PM - 6:00 PM)

-Conveners: Chris Pinkenburg

time	[id] title	presenter
4:30 PM	[351] DD4hep: a community driven detector description tool for HEP	GAEDE, Frank-Dieter
4:45 PM	[60] CMS Experience with Adoption of the Community-supported DD4hep Toolkit	Dr VUOSALO, Carl
5:00 PM	[364] Evolution of the ROOT Tree I/O	BLOMER, Jakob
5:15 PM	[366] Automatic Differentiation in ROOT	SHADURA, Oksana
5:30 PM	[489] Review of High-Quality Pseudo Random Number Generators	MONETA, Lorenzo
5:45 PM	[359] Using multiple engines in the Virtual Monte Carlo package	VOLKEL, Benedikt

Thursday, November 7, 2019

Track 2 – Offline Computing: ML Tracking and parallelisation - Riverbank R6 (11:00 AM - 12:30 PM)

-Conveners: Paul James Laycock

time	[id] title	presenter
11:00 AM	[153] GPU Application in JUNO	Dr LUO, Wuming
11:15 AM	[502] Reconstruction for Liquid Argon TPC Neutrino Detectors Using Parallel Architectures	CERATI, Giuseppe
11:30 AM	[399] Similarity Hashing and Learning for Tracks Reconstruction	AMROUCHE, Sabrina
11:45 AM	[369] Mikado approach for the TrackML Particle Tracking Challenge	GORBUNOV, Sergey
12:00 PM	[251] Reconstruction of Charged Particle Tracks in Realistic Detector Geometry Using a Vectorized and Parallelized Kalman Filter Algorithm	CERATI, Giuseppe
12:15 PM	[503] Edepillim: A New Muon Energy Reconstruction Method	Dr ROBERTSON, Sally

Track 2 – Offline Computing: Reconstruction and Performance - Riverbank R6 (2:00 PM - 3:30 PM)

-Conveners: Chiara Ilaria Rovelli

time	[id] title	presenter
2:00 PM	[483] Prompt calibration automation at Belle II	SEVIOR, Martin
2:15 PM	[430] Alignment for the first precision measurements at Belle II	BILKA, Tadeas BILKA, Tadeas
2:30 PM	[384] Performance of Belle II tracking on collision data	RADOS, Petar Kevin RADOS, Petar Kevin
2:45 PM	[245] Improvements to ATLAS primary vertexing reconstruction for LHC Run 3	CASPER, Dave
3:00 PM	[536] Experience supporting Belle II CDB server Infrastructure for Phase 3	GAMBOA, Carlos Fernando
3:15 PM	[360] The CMS Run Registry: Data Certification and Publication System tool	ESPINOSA BURBANO, Fabio Alberto