

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

Monday 4 November 2019

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

-Conveners: Teng Jian Khoo

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

Track 2 – Offline Computing: ML and generative simulation - Riverbank R6 (14:00 - 15:30)

-Conveners: Chiara Ilaria Rovelli

time	[id] title	presenter
14:00	[306] Fast Simulations at LHCb	DAVIS, Adam
14:15	[580] Fast simulation methods in ATLAS: from classical to generative models	RAINE, Johnny
14:30	[398] Learning high-level structures in HEP data with novel Deep Auto-Regressive Networks for Fast Simulation	IFRIM, Ioana
14:45	[492] Particle shower simulation in high granularity calorimeters using 3 dimensional convolutional Generative Adversarial Networks	BRITO DA ROCHA, Ricardo
15:00	[295] Generative Adversarial Networks for LHCb Fast Simulation	RATNIKOV, Fedor
15:15	[37] Generation of Belle II pixel detector background data with a GAN	KUHR, Thomas

Tuesday 5 November 2019

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

-Conveners: Chris Pinkenburg

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

Track 2 – Offline Computing: Lightweight simulation and optimisation - Riverbank R6 (14:00 - 15:30)

-Conveners: Chris Pinkenburg

time	[id] title	presenter
14:00	[285] Gaussino - a Gaudi-based core simulation framework	MULLER, Dominik
14:15	[180] Geant4 performance optimization in the ATLAS experiment	MUSKINJA, Miha
14:30	[226] FullSimLight: ATLAS standalone Geant4 simulation	BANDIERAMONTE, Marilena
14:45	[546] The Heavy Photon Search Experiment Software Environment	GRAF, Norman Anthony
15:00	[441] Selective background Monte Carlo simulation at Belle II	KAHN, James
15:15	[224] Multithreaded simulation for ATLAS: challenges and validation strategy	BANDIERAMONTE, Marilena

Track 2 – Offline Computing: Cross-experiment frameworks & foundations - Riverbank R6 (16:30 - 18:00)

-Conveners: Chris Pinkenburg

time	[id] title	presenter
16:30	[351] DD4hep: a community driven detector description tool for HEP	GAEDE, Frank-Dieter
16:45	[60] CMS Experience with Adoption of the Community-supported DD4hep Toolkit	Dr VUOSALO, Carl
17:00	[364] Evolution of the ROOT Tree I/O	BLOMER, Jakob
17:15	[366] Automatic Differentiation in ROOT	SHADURA, Oksana
17:30	[489] Review of High-Quality Pseudo Random Number Generators	MONETA, Lorenzo
17:45	[359] Using multiple engines in the Virtual Monte Carlo package	VOLKEL, Benedikt

Thursday 7 November 2019

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

-Conveners: Paul James Laycock

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

Track 2 – Offline Computing: Reconstruction and Performance - Riverbank R6 (14:00 - 15:30)

-Conveners: Chiara Ilaria Rovelli

time	[id] title	presenter
14:00	[483] Prompt calibration automation at Belle II	SEVIOR, Martin
14:15	[430] Alignment for the first precision measurements at Belle II	BILKA, Tadeas BILKA, Tadeas
14:30	[384] Performance of Belle II tracking on collision data	RADOS, Petar Kevin RADOS, Petar Kevin
14:45	[245] Improvements to ATLAS primary vertexing reconstruction for LHC Run 3	CASPER, Dave
15:00	[536] Experience supporting Belle II CDB server Infrastructure for Phase 3	GAMBOA, Carlos Fernando
15:15	[360] The CMS Run Registry: Data Certification and Publication System tool	ESPINOSA BURBANO, Fabio Alberto