

CHEP 2018 Conference, Sofia, Bulgaria

Monday, July 9, 2018

T6 - Machine learning and physics analysis: S1 - Hall 9 (11:00 AM - 12:30 PM)

-Conveners: Andrea Rizzi; Sergei Gleyser

time	[id] title	presenter
11:00 AM	[205] Partnering with industry for machine learning at HL-LHC	GIRONE, Maria
11:15 AM	[32] New Machine Learning Developments in ROOT/TMVA	ALBERTSSON, Kim
11:30 AM	[515] The Scikit-HEP project	RODRIGUES, Eduardo
11:45 AM	[405] HIPSTER - a python package for particle physics analyses	CHARMAN, Thomas Paul
12:00 PM	[569] Interactive, scalable, reproducible data analysis with containers, Jupyter, and Parsl	Ms WOODARD, Anna Elizabeth
12:15 PM	[646] #182 slot	

T6 - Machine learning and physics analysis: S2 - Hall 9 (2:00 PM - 4:00 PM)

-Conveners: Sofia Vallecorsa

time	[id] title	presenter
2:00 PM	[376] Study of Neural Network Size Requirements for Approximating Functions Relevant to HEP	STIETZEL, Jessica
2:15 PM	[492] Adversarial event generator tuning with Bayesian Optimization	Mr BORISYAK, Maxim
2:30 PM	[241] Anomaly detection using Deep Autoencoders for the assessment of the quality of the data acquired by the CMS experiment	POL, Adrian Alan
2:45 PM	[227] Online detector monitoring using AI: challenges, prototypes and performance evaluation for automation of online quality monitoring of the CMS experiment exploiting machine learning algorithms.	POL, Adrian Alan
3:00 PM	[142] ATLAS Analytics and Machine Learning Platforms	CATMORE, James
3:15 PM	[550] REANA: A System for Reusable Research Data Analyses	SIMKO, Tibor
3:30 PM	[159] Continuous Analysis Preservation and Streamlining for the ATLAS Experiment	HEINRICH, Lukas Alexander
3:45 PM	[134] Allocation Optimization for the ATLAS Rebalancing Data Service	VAMOSI, Ralf

Tuesday, July 10, 2018

T6 - Machine learning and physics analysis: S3 - Hall 9 (11:00 AM - 12:30 PM)

-Conveners: Sofia Vallecorsa

time	[id] title	presenter
11:00 AM	[250] Columnar data processing for HEP analysis	PIVARSKI, Jim
11:15 AM	[240] Using Big Data Technologies for HEP analysis	CREMONESI, Matteo
11:30 AM	[309] Pandas DataFrames for F.A.S.T. binned analysis at CMS	Dr KRIKLER, Benjamin
11:45 AM	[345] RDataFrame: Easy Parallel ROOT Analysis at 100 Threads	GUIRAUD, Enrico
12:00 PM	[311] A further reduction in CMS event data for analysis: the NANO AOD format	RIZZI, Andrea
12:15 PM	[277] Developing a Declarative Analysis Language: LINQToROOT	WATTS, Gordon

T6 - Machine learning and physics analysis: S4 - Hall 9 (2:00 PM - 4:00 PM)

-Conveners: Sergei Gleyser

time	[id] title	presenter
2:00 PM	[572] Machine learning at the Cosmic Frontier	Dr TUNNELL, Christopher
2:15 PM	[442] Deep Learning applied to the Cherenkov Telescope Array data analysis	Dr VUILLAUME, Thomas
2:30 PM	[602] Machine Learning Techniques in the CMS Higgs to Di-muons Search	BOURILKOV, Dimitri
2:45 PM	[221] Using Generative Adversarial Networks for fast simulations in the ALICE Experiment	Dr TRZCINSKI, Tomasz Piotr
3:00 PM	[39] The use of adversaries for optimal neural network configuration	Prof. SEVIOR, Martin
3:15 PM	[399] Systematics aware learning: a case study in High Energy Physics	Mr ESTRADE, Victor
3:30 PM	[90] Binary classifier metrics for event selection optimization in HEP	VALASSI, Andrea
3:45 PM	[357] Application of a Convolutional Neural Network for image classification to the analysis of collisions in High Energy Physics	Mr HEREDIA CACHA, Ignacio

Wednesday, July 11, 2018

T6 - Machine learning and physics analysis: S5 - Hall 9 (11:30 AM - 1:00 PM)

-Conveners: **Andrea Rizzi**

time	[id] title	presenter
11:30 AM	[231] End-to-end Deep Learning Applications for Event Classification at CMS	ANDREWS, Michael
11:45 AM	[316] Machine learning techniques for jet flavour identification at CMS	VERZETTI, Mauro
12:00 PM	[31] The Belle II flavor tagger	Mr ABUDINEN, Fernando
12:15 PM	[338] Boosting Neutral Particles Identification by Boosting Trees: LHCb case	CHEKALINA, Viktoriia
12:30 PM	[44] Application of machine learning techniques at BESIII experiment	Dr LIU, Beijiang
12:45 PM	[497] Physics Inspired Heavy Object Tagging	RUSSELL, Michael

Thursday, July 12, 2018

T6 - Machine learning and physics analysis: S6 - Hall 9 (11:00 AM - 12:30 PM)

-Conveners: Sofia Vallecorsa

time	[id] title	presenter
11:00 AM	[266] Large-Scale Distributed Training of Deep Neural Net Models	PANTALEO, Felice
11:15 AM	[220] Training Generative Adversarial Models over Distributed Computing Systems	VLIMANT, Jean-Roch
11:30 AM	[383] Scaling studies for deep learning in LArTPC event classification	STRUBE, Jan Fridolf
11:45 AM	[373] Fitting and Modeling in ROOT	MONETA, Lorenzo
12:00 PM	[532] GPU analyses on the grid	BURR, Chris
12:15 PM	[103] Deployment of a Matrix Element Method code for the ttH channel analysis on GPU's platform	GRASSEAU, Gilles

T6 - Machine learning and physics analysis: S7 - Hall 9 (2:00 PM - 3:30 PM)

-Conveners: Andrea Rizzi

time	[id] title	presenter
2:00 PM	[387] The HEP.TrkX project. Approaching Charged Particle Tracking at the HL-LHC with Deep Learning, for Online and Offline Processing	Dr VLIMANT, Jean-Roch
2:15 PM	[489] THE PARTICLE TRACK RECONSTRUCTION BASED ON DEEP LEARNING NEURAL NETWORKS	Prof. OSOSKOV, Gennady
2:30 PM	[481] Machine learning approaches in tracks pattern recognition for the SHiP Spectrometer Tracker	HUSHCHYN, Mikhail
2:45 PM	[511] Track Seed Filtering using Convolutional Neural Network at the CMS High Level Trigger	Mr DI FLORIO, Adriano
3:00 PM	[199] trackML : the Kaggle HEP tracking challenge	KIEHN, Moritz
3:15 PM	[578] Novel Approaches to Track & Vertex Reconstruction in the Upgraded LHCb VELO	Dr RINNERT, Kurt