

6th Inter-experiment Machine Learning Workshop

Wednesday 31 January 2024

Poster Session: Poster Session 1 - 61/1-201 - Pas perdis - Not a meeting room - (15:30 - 18:55)

time	[id] title	presenter
15:30	[30] Machine learning approaches for parameter reweighting in MC samples of top quark production in CMS	GUGLIELMI, Valentina
15:35	[25] ML-assisted reconstruction of hadron-collider events with mini-jets	MURNAUER, Josef Modestus
15:40	[24] Deep learning for the rare top decay $t \rightarrow sW$ at the LHC	HEO, Jeewon
15:45	[23] Improving the line-segment tracking algorithm with machine learning for the High Luminosity LHC	GUIANG, Jonathan
15:50	[17] A data-driven and model-agnostic approach to solving combinatorial assignment problems in searches for new physics	BADEA, Anthony MONTEJO BERLINGEN, Javier
15:55	[16] DeepCore2.0: Convolutional Neural Network for Tracking in the Core of High-Energy Jets	BOUCHAMAOU, Hichem
16:00	[14] Topological separation of dielectron signals using machine learning in Pb--Pb collisions with ALICE	JUNG, Jerome
16:05	[13] Model-independent strategy for New Physics search at LHC using Anomaly Detection algorithms	VASLIN, Louis
16:10	[12] Electron identification with a convolutional neural network	NGUYEN, Hoang Dai Nghia
16:15	[11] Particle identification with Machine Learning for ALICE ITS2	LUCIA, Giorgio Alberto
16:20	[9] Decorrelation using Optimal Transport	ALGREN, Malte
16:25	[8] Particle Transformer for tau lepton pair invariant mass reconstruction for the $HH \rightarrow b\bar{b}t\bar{t}$ CMS analysis	CAMAGNI, Valentina
16:30	[7] Apples to Apples in Jet Quenching	A. GONÇALVES, João
16:35	[5] Uncertainty-aware Machine Learning for Proton Therapy Range Verification with a Digital Tracking Calorimeter	SCHILLING, Alexander
16:40	[115] Training and optimisation of large transformer models at CERN: an ATLAS case study on Kubeflow - Poster	DRAGUET, Maxence
16:45	[113] Reinforcement Learning Algorithms for Charged Particle Tracking with Applications in Proton Computed Tomography - Poster	KORTUS, Tobias
16:50	[111] Out-of-Distribution Multi-set Generation with Context Extrapolation for Amortized Simulation and Inverse Problems - Poster	HASHEMI, Hosein
16:55	[114] Electron and Proton Classification with AMS ECAL Using Convolutional Vision Transformers and Domain Adaptation - Poster	TURK, Berk
17:00	[112] Differentiable Vertex Fitting for Jet Flavour Tagging - Poster	DE ALMEIDA INACIO, Ruben Miguel
17:05	[118] Modeling N_{ch} distributions and p_{T} spectra in high-energy pp collisions with DNNs - Poster	CALMON BEHLING, Maria Alejandra
17:10	[110] DeepTreeGANv2: Iterative Pooling of Point Clouds - Poster	Mr SCHAM, Moritz

17:15	[108] Accelerating the search for mass bumps using the Data-Directed Paradigm - Poster	PASCUAL, Bruna
17:20	[107] A Deep Generative Model for Hadronization - Poster	CHAN, Jay
17:25	[125] Attention to the strengths of physics interactions: Enhanced Deep Learning Event Classification for Particle Physics Experiments - Poster	MOSKVITINA, Polina
17:30	[106] Longitudinal Beam Diagnostics and Phase Space Reconstruction in the LHC Using ML - Poster	ILIAKIS, Konstantinos

Thursday 1 February 2024

Poster Session: Poster Session 2 - 61/1-201 - Pas perdis - Not a meeting room - (15:30 - 18:30)

time	[id] title	presenter
15:30	[66] Simultaneous calibration of jet energy and mass using DNN in ATLAS	DELSART, Pierre Antoine
15:35	[65] Search for long-lived heavy neutral leptons using a displaced jet tagger	KOMM, Matthias
15:40	[61] Transformers for Particle Track Reconstruction and Hit Clustering	DOBREVA, Nadezhda
15:45	[57] Simulation-based inference in the search for CP violation in leptonic WH production	BARRUÉ, Ricardo
15:50	[50] Conditional normalizing flows for correcting simulations	DAUMANN, Caio Cesar
15:55	[45] Unsupervised tagging of semivisible jets with energy-based autoencoders in CMS	EBLE, Florian
16:00	[44] Energy-based graph autoencoders for semivisible jet tagging in the Lund representation	RIBBE, Christoph Frederik
16:05	[41] Systematic Effects in Jet Tagging Performance for the ATLAS Detector	GREIF, Kevin Thomas
16:10	[38] BSM models and parameter inference via an n-channel 1D-CNN	KOAY, Yong Sheng
16:15	[32] Generating parton-level events from reconstructed events with Conditional Normalizing Flows	PETRE, Adrian Antonio
16:20	[29] Machine learning for enhanced measurement of Higgs boson production cross section via vector boson fusion in $H \rightarrow WW^*$ with the ATLAS detector	MARR, Metea Castilleja
16:25	[105] The DL Advocate: Playing the devil's advocate with hidden systematic uncertainties - Poster	HIJANO MENDIZABAL, Guillermo
16:30	[116] Unweighted event generation with matrix element surrogates - Poster	JANSSEN, Timo
16:35	[124] the Fair Universe project and the HiggsML Uncertainty Challenge - Poster	CHAKKAPPAL, Ragansu
16:40	[121] Reinforcement learning for automatic data quality monitoring in HEP experiments - Poster	JULLIAN PARRA, Olivia
16:45	[122] Re-simulation-based self-supervision for representation learning - Poster	KRUPA, Jeffrey
16:50	[120] Parametrising profiled likelihoods with neural networks - Poster	Dr REYES-GONZÁLEZ, Humberto
16:55	[117] End-to-end Reconstruction Algorithm for Highly Granular Calorimeters - Poster	Mr ZEHETNER, Philipp
17:00	[119] Masked particle modelling - Poster	KLEIN, Samuel Byrne
17:05	[123] Finetuning Foundation Models for Joint Analysis Optimization - Poster	VIGL, Matthias
17:10	[109] Advances in developing deep neural networks for finding primary vertices in proton-proton collisions at the LHC - Poster	AKAR, Simon