

Conceptual Advances in Deep Learning for Research on Universe and Matter

Tuesday, September 13, 2022

Participant Contributions (9:00 AM - 10:30 AM)

time	[id] title	presenter
9:00 AM	[18] Reinforced Jet-Parton Assignment for Particle Physics Analyses	NOLL, Dennis
9:20 AM	[19] Open Neural Network Exchange Format - An Introduction	Dr FEHLNER, Andreas
9:40 AM	[20] CosmicNet II: Emulating extended cosmologies with efficient and accurate neural networks	GÜNTHER, Sven
10:00 AM	[21] The State of the Art of Deep-Learning-Based Event Classification and Reconstruction for IACTs	Dr SPENCER, Samuel

Wednesday, September 14, 2022

Participant Contributions (2:00 PM - 3:30 PM)

time	[id] title	presenter
2:00 PM	[22] Bayesian neural networks for particle identification	Prof. ERDMANN, Johannes
2:20 PM	[24] Boosting mono-jet searches with model agnostic deep learning	FINKE, Thorben
2:40 PM	[29] Super-resolution of photon calorimeter images using generative adversarial networks	MAUSOLF, Florian

Participant Contributions (4:30 PM - 6:00 PM)

time	[id] title	presenter
4:30 PM	[25] An ML approach to the classification of phase transitions in many flavor QCD	NEUMANN, Marius
4:50 PM	[26] A Machine Learning Approach to Searching Dark Matter Subhalos in Fermi-LAT Sources	NIPPEL, Kathrin
5:10 PM	[27] Virtual Patho-Histology at the GINIX 3D X-ray Microscope	Dr OSTERHOFF, Markus

Thursday, September 15, 2022

Participant Contributions (9:00 AM - 10:30 AM)

time	[id] title	presenter
9:00 AM	[28] Deep Learning-based Imaging in Radio Interferometry	FRÖSE, Stefan
9:20 AM	[30] Information Field Theory -- Bayesian Inference for Fields	ROTH, Jakob
9:40 AM	[31] Interpolating Calibration Data on the Sphere with Information Field Theory	Mr STRAUB, Maximilian