

Session Program

Sep 12 - 16, 2022

Conceptual Advances in Deep Learning for Research on Universe and Matter

Participant Contributions

Hotel zur Post
Hauptstraße 8-10, 51674 Wiehl

Tue, September 13

9:00 AM

Participant Contributions

Session | **Location:** Hotel zur Post, Hauptstraße 8-10, 51674 Wiehl

09:00 – 09:20

Reinforced Jet-Parton Assignment for Particle Physics Analyses

Speaker

Dennis Noll

09:20 – 09:40

Open Neural Network Exchange Format - An Introduction

Speaker

Dr Andreas Fehlner

09:40 – 10:00

CosmicNet II: Emulating extended cosmologies with efficient and accurate neural networks

Speaker

Sven Günther

10:00 – 10:20

The State of the Art of Deep-Learning-Based Event Classification and Reconstruction for IACTs

Speaker

Dr Samuel Spencer

10:30 AM

Wed, September 14

2:00 PM

Participant Contributions

Session | **Location:** Hotel zur Post, Hauptstraße 8-10, 51674 Wiehl

14:00 – 14:20

Bayesian neural networks for particle identification

Speaker

Prof. Johannes Erdmann

14:20 – 14:40

Boosting mono-jet searches with model agnostic deep learning

Speaker

Thorben Finke

14:40 – 15:00

Super-resolution of photon calorimeter images using generative adversarial networks

Speaker

Florian Mausolf

3:30 PM

4:30 PM

Participant Contributions

Session | **Location:** Hotel zur Post, Hauptstraße 8-10, 51674 Wiehl

16:30 – 16:50

An ML approach to the classification of phase transitions in many flavor QCD

Speaker

Marius Neumann

16:50 – 17:10

A Machine Learning Approach to Searching Dark Matter Subhalos in Fermi-LAT Sources

Speaker

Kathrin Nippel

17:10 – 17:30

Virtual Patho-Histology at the GINIX 3D X-ray Microscope

Speaker

Dr Markus Osterhoff

6:00 PM

Thu, September 15

9:00 AM

Participant Contributions

Session | **Location:** Hotel zur Post, Hauptstraße 8-10, 51674 Wiehl

09:00 – 09:20

Deep Learning-based Imaging in Radio Interferometry

Speaker

Stefan Fröse

09:20 – 09:40

Information Field Theory -- Bayesian Inference for Fields

Speaker

Jakob Roth

09:40 – 10:00

Interpolating Calibration Data on the Sphere with Information Field Theory

Speaker

Mr Maximilian Straub

10:30 AM