

Session Program

Feb 17 - 19, 2020

Big Data Science in Astroparticle Research - Workshop

Deep Learning

RWTH Aachen University SuperC
RWTH Aachen University Templergraben 57, 52062 Aachen phone:0241 8090801

Tue, February 18

10:00 AM

Deep Learning

Session |

Location: RWTH Aachen University SuperC, RWTH Aachen University Templergraben 57, 52062 Aachen phone:0241 8090801

10:00 - 10:20

Applying Dynamic Graph CNN to reconstruct the direction of electrons in JUNO

Speaker

Mr Hauke Schmidt

10:20 - 10:40

Identification of Cosmic Rays from Sources using Dynamic Graph Convolutional Neural Networks

Speaker

Mr Niklas Langner

10:40 AM

11:10 AM

Deep Learning

Session |

Location: RWTH Aachen University SuperC, RWTH Aachen University Templergraben 57, 52062 Aachen phone:0241 8090801

11:10 - 11:50

FPGA Belle II Trigger

Speaker

Mr Steffen Bähr

11:50 - 12:10

FPGA Trigger of SuperCDMS

Speaker

Dr Hanno Meyer zu Theenhausen

12:10 - 12:30

Xmax Reconstruction with AugerPrime using Deep Learning

Speaker

Sonja Schröder

12:30 - 12:50

1) Lowering the threshold of Tunka-Rex with autoencoder; 2) Toward Tunka-Rex Virtual Observatory

Speaker

Dmitriy Kostunin

1:00 PM

2:30 PM

Deep Learning

Session |

Location: RWTH Aachen University SuperC, RWTH Aachen University Templergraben 57, 52062 Aachen phone:0241 8090801

14:30 - 15:10

Bayesian Networks (exact title & title tbc)

Speaker

Prof. Tilman Plehn

15:10 - 15:30

Exploitation of Symmetries and prior Knowledge in Deep Learning Architectures for IceCube

Speaker

Mirco Huenefeld

15:30 - 15:50

Addressing domain adaptation issues with CRNNs and VERITAS data

Speaker

Mr Samuel Spencer

3:50 PM

Wed, February 19

9:00 AM

Deep Learning

Session |

Location: RWTH Aachen University SuperC, RWTH Aachen University Templergraben 57, 52062 Aachen phone:0241 8090801

09:00 - 09:20

Simulation of Extensive Air Showers with Deep Neural Networks

Speaker

Marcel Köpke

09:20 - 09:40

Physics motivated GAN for generating fourmomenta

Speaker

Mr Niclas Eich

9:40 AM