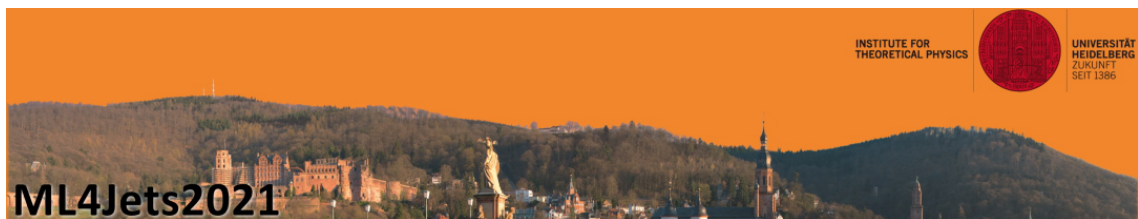


Session Program

6-8 Jul 2021



ML4Jets2021

Simulation and Generative Models

Wednesday 7 July

14:00

Simulation and Generative Models: Detector Simulation

Session | **Location:** Philosophenweg 12, 69120 Heidelberg, Germany | **Conveners:**
Ramon Winterhalder, Dalila Salamani

14:00–14:20

CaloFlow: Fast and Accurate Generation of Calorimeter Showers with Normalizing Flows

Speaker

Dr Claudius Krause

14:20–14:40

Multi-detector geometry modeling and Geant4 Integration

Speaker

Dalila Salamani

14:40–15:00

Angular Conditioning of Deep Generative Models for Fast Simulation of High Granularity Calorimeters

Speaker

Peter McKeown

15:00–15:20

Fast and Accurate Electromagnetic and Hadronic Showers from Generative Models

Speaker

Engin Eren

15:20–15:40

AtIFast3: The next generation of fast simulation in ATLAS

Speaker

Joshua Falco Beirer

15:40

15:40

Simulation and Generative Models: Event and Jet Generation

Session | **Location:** Philosophenweg 12, 69120 Heidelberg, Germany | **Conveners:**
Dalila Salamani, Ramon Winterhalder

15:40–16:00

Fast Simulation of Jets with VAEs

Speaker

Mary Touranakou

16:00–16:20

Foundations of a Fast, Data-Driven, Machine-Learned Simulator

Speakers

Jessica N. Howard, Jessica N. Howard

16:20–16:40

Particle Cloud Generation with Message Passing GANs

Speaker

Raghav Kansal

16:40–17:00

White Box AI for parton shower development

Speaker
Felix Ringer

17:00–17:20 **How to GAN Event Unweighting**

Speaker
Mr Mathias Backes

17:20–17:40 **Sparse Data Generation with Convolutional VAE**

Speaker
Breno Orzari

17:40–18:00 **Super-Resolution for QCD and Top Jets**

Speaker
Lukas Blecher

18:00