

## Session Program

June 13, 2022 to July 8, 2022

**MITP  
SCIENTIFIC  
PROGRAM**

**A Deep-Learning Era of Particle Theory**  
13 June – 8 July 2022

 <https://indico.mitp.uni-mainz.de/event/###>

**mitp**  
Mainz Institute  
Theoretical Physics

Group	Frequency
$\emptyset$	0.1
$O(2)$	0.0
$T$	0.0
$T_1$	0.6
$Z_2$	0.3

## A Deep-Learning Era of Particle Theory

### *Discussion Session*

Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430  
Staudingerweg 9 / 2nd floor, 55128 Mainz

## Mon, June 27

4:00 PM

5:00 PM

### Discussion Session: Normalizing Flow applications in HEP - Rob Verheyen and Sung Hak Lim

Session |

Location: Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430, Staudingerweg 9 / 2nd floor, 55128 Mainz

## Tue, June 28

4:00 PM

5:00 PM

### Discussion Session: Calorimeter Challenge -- Claudius Krause

Session |

Location: Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430, Staudingerweg 9 / 2nd floor, 55128 Mainz

## Wed, June 29

4:00 PM  
|  
5:00 PM

### Discussion Session: Quantum and Quantum-inspired Machine Learning and likelihoods

Session |

**Location:** Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430, Staudingerweg 9 / 2nd floor, 55128 Mainz

## Thu, June 30

4:00 PM  
5:00 PM

### Discussion Session: Anomaly detection

Session |

Location: Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430, Staudingerweg 9 / 2nd floor, 55128 Mainz

## Fri, July 1

4:00 PM  
5:00 PM

### Discussion Session: Monte Carlo and ML

Session |

Location: Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430, Staudingerweg 9 / 2nd floor, 55128 Mainz

## Mon, July 4

4:00 PM

5:00 PM

### Discussion Session: Marat Freytsis "ML and Pulsars"

Session |

Location: Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430, Staudingerweg 9 / 2nd floor, 55128 Mainz

## Tue, July 5

4:00 PM

5:00 PM

### Discussion Session: Maeve Madigan "Global SMEFT Analyses"

Session |

Location: Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430, Staudingerweg 9 / 2nd floor, 55128 Mainz



## Wed, July 6

4:00 PM  
|  
5:00 PM

### Discussion Session: Luigi Favaro "Energy-based Autoencoder"

Session |

Location: Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430, Staudingerweg 9 / 2nd floor, 55128 Mainz

## Thu, July 7

4:00 PM

5:00 PM

### Discussion Session: Claudius Krause/Anja Butter/Theo Heimesel "Conditional Normalizing Flows"

Session |

Location: Mainz Institute for Theoretical Physics, Johannes Gutenberg University, 02.430, Staudingerweg 9 / 2nd floor, 55128 Mainz