Session Program

6-8 Jul 2021



ML4Jets2021

BSM

Tuesday 6 July

14:00 **BSM: Overdensity Methods** Session | Location: Philosophenweg 12, 69120 Heidelberg, Germany | Conveners: Caterina Doglioni, Mihoko Nojiri 14:00-14:20 High-dimensional Anomaly Detection with Radiative Return in e+e- Collisions Speaker Julia Lynne Gonski 14:20-14:40 CATHODE part 1: introducing a new model-agnostic search strategy for resonant new physics at the LHC Speaker Anna Hallin 14:40-15:00 CATHODE part 2: robustness and comparison to other methods Speaker Manuel Sommerhalder 15:00-15:20 Anomaly Detection in the Copula Space Speaker Tommaso Dorigo 15:20 15:20 BSM: Latent Space Anomaly Detection Session | Location: Philosophenweg 12, 69120 Heidelberg, Germany | Conveners: Mihoko Nojiri, Caterina Doglioni 15:20-15:40 **Jet Metrics and Autoencoders** Speaker Rashmish Mishra 15:40-16:00 Detecting Anomalous jets with Graph Neural Networks Speaker Mr Vishal Singh Ngairangbam 16:00-16:20 Review of the Dark Machine Anomaly Score Challenge I Speaker Joe Davies 16:20-16:40 Review of the Dark Machine Anomaly Score Challenge II Speaker Bryan Ostdiek 16:40 16:40 BSM: Data Space Searches with Autoencoders Session | Location: Philosophenweg 12, 69120 Heidelberg, Germany | Conveners: Mihoko Nojiri, Caterina Doglioni

16:40-17:00 Boosting new physics sensitivity with Variational Autoencoders

Speaker
Kinga Anna Wozniak

17:00-17:20

Autoencoders for unsupervised anomaly detection in high energy physics
Speaker
Thorben Finke

17:20-17:40

Recognizing hadronic SUEP at the LHC with Unsupervised Machine Learning
Speaker
Jared Barron

17:40-18:00 Classifier-based Anomalous Jet Tagging
Speaker
Taoli Cheng

18:00