Contribution ID: **96**

Type: **not specified**

Machine Learning for Tau identification in the IDEA Dual readout calorimeter

Wednesday, 17 March 2021 07:20 (20 minutes)

Tau lepton physic plays an important role in the research programme at future e+e- experiments. To fully exploit the physics potential of machine and experiments, and for a cost-effective detector design, it is important to to implement from start advanced Machine Learning methods in the development of the detector. With this respect we report here on an ongoing study on τ-identification (leptonic and hadronic tau decays, and jets from QCD) in the IDEA dual-readout calorimeter concept, using modern machine learning methods based on differentiable deep neural networks (Convolutional-NN and Graph-NN).

Time Zone

Europe/Africa/Middle East

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Session Classification: PD4: Software & Detector Performance

Track Classification: Physics and Detectors Tracks: PD4: Software & Detector Performance