Contribution ID : **289** Type : **Oral talk**

Using Machine Learning for Particle Identification in MPD

Friday, 2 December 2022 19:15 (15)

Particle Identification (PID) is an important part for most of the physics analysis in heavy-ion experiments. The principal challenge for PID is how to provide good identification in a wide range of particle momenta. Different approaches are used to combine observations from various detectors to enrich overall PID capabilities. Hence, PID is a classification task, that is why it can be performed using Machine Learning (ML) approach which has a wide range of different models for classification task. Those methods can help to extend PID over the classical methods. This study has performed the optimal multilayer perceptron (MLP) classifier selection for particle identification.

Primary author(s) : TOLKACHEV, Grigorii (National Research Nuclear University MEPhI (RU)); Mr. KOROBITSIN, Artem (JINR); APARIN, Alexey (JINR)

Presenter(s) : TOLKACHEV, Grigorii (National Research Nuclear University MEPhI (RU))

Session Classification : Heavy Ion Physics

Track Classification : Heavy ion physics