



Contribution ID : 71

Type : **Poster**

## **Machine learning applications for particle identification in MPD**

*Tuesday, 29 November 2022 17:10 (120)*

Machine Learning methods are proposed to be used for particle identification (PID) in more and more experiments at high energy physics nowadays. Particle identification plays an important role in high-energy physics analysis therefore determines the success of performing an experiment. This determines the importance of using machine learning to improve particle identification in the regions where conventional methods fail to provide good identification. This report gives first tests of machine learning methods applications using gradient boosting on decision trees to particle identification problem in MPD experiment.

**Primary author(s)** : PAPOYAN, Vladimir (JINR); Mr. KOROBITSIN, Artem (JINR); MUDROKH, Alexander (JINR); APARIN, Alexey (JINR); Dr. AYRIYAN, Alexander (JINR)

**Presenter(s)** : PAPOYAN, Vladimir (JINR)

**Session Classification** : Poster Session

**Track Classification** : Facilities and advanced detector technologies