## 10th International Conference "Distributed Computing and Grid Technologies in Science and Education" (GRID'2023)



Contribution ID: 352

Type: not specified

## Gradient Boosted Decision Tree for Particle Identification in the MPD experiment

Tuesday, 4 July 2023 15:45 (15 minutes)

Machine Learning methods are proposed to be used in more and more high energy physics tasks nowadays, in particular for charged particle identification (PID). It is due to the fact that machine learning algorithms improve PID in the regions where conventional methods fail to provide good identification. This report gives results of gradient boosted decision tree application for particle identification in the MPD experiment.

Summary

Primary author: PAPOYAN, Vladimir (JINR & AANL)

**Co-authors:** Dr AYRIYAN, Alexander (JINR & AANL & Dubna State University); MUDROKH, Alexander (JINR); APARIN, Alexey (Joint Institute for Nuclear Research); KOROBITSIN, Artem (Veksler and Baldin Laboratory of High Energy Physics, Joint Institute for Nuclear Research); GRIGORIAN, Hovik (JINR)

Presenter: PAPOYAN, Vladimir (JINR & AANL)

Session Classification: Computing for MegaScience Projects

Track Classification: Computing for MegaScience Projects