

Invited: HENP-I-03

Multivariate techniques in analysis of the LHC data

Satyaki Bhattacharya

Saha Institute of Nuclear Physics, Kolkata, India

Analysis of data in high energy physics (HEP) experiments are almost always multivariate analyses. Machine learning techniques have been used for decades to address multivariate problems in particle identification and data analysis in HEP. The searches at the Large Hadron Collider (LHC), including the search and discovery of the new γ boson, strongly relied on machine learning techniques, at various levels. In this talk we will give an overview the usage of machine learning techniques in searches at the LHC, with highlights on some interesting results from the LHC run 1.