

## MVAs in Belle II experiment

In this presentation, we discuss the latest developments and applications of Multivariate Analysis (MVA) techniques within the Belle II experiment. The Belle II experiment, operating at the SuperKEKB accelerator in Japan, aims to explore the fundamental interactions of particles and test the limits of the Standard Model of particle physics.

MVA techniques are essential tools in the analysis of complex data sets obtained from high-energy physics experiments. These techniques allow for the efficient separation of signal from background and the identification of rare events, enhancing the overall sensitivity of the experiment.

Furthermore, we will highlight the integration of MVA techniques with the Belle II software framework, enabling streamlined data processing and analysis workflows. The impact of these advanced analysis methods on the precision and accuracy of Belle II measurements will be discussed, alongside future prospects for further improvements.

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**Track Classification:** Machine Learning