Contribution ID: **4** Type: **Heavy-ion Physics**

Reconstruction of Weak Decays using Machine Learning with HADES

Tuesday, 29 October 2024 15:00 (15 minutes)

In this contribution we present weak decay topology recognition utilizing an artifial Neural Network. This approach significantly improved the precision of the analysis of Λ hyperons and K0s mesons and enabled us to measure more rare probes like the Ξ hyperon or Hypernuclei for the first time in heavy-ion collisions with HADES. We highlight the choice of input parameters as well as the applied training proceedure and finally present the obtained results.

Primary author: Dr SPIES, Simon (Goethe-University Frankfurt)

Presenter: Dr SPIES, Simon (Goethe-University Frankfurt)

Session Classification: Session