ID de Contribution: **10** Type: **Non spécifié**

Enhancing Monojet searches with ML

lundi 4 mars 2024 15:10 (4 minutes)

Dark Matter particles could potentially be detected at the Large Hadron Collider (LHC) using the monojet channel, where at least one high pT jet recoils against missing transverse momentum. However, these searches pose a challenge as they require distinguishing subtle differences among similar jets. One way to improve this is by using Machine Learning (ML) methods to analyze correlations between jet constituents. I plan to share a proof-of-concept analysis employing a graph neural network to distinguish between the Standard Model background and signal from neutralino Dark Matter. I will provide the preliminary results obtained from evaluating this approach on MC simulated data.

Orateur: MASELEK, Rafal (LPSC (Grenoble))

Classification de Session: Lightning talks