

Deep Learning applied to hit classification for BESIII drift chamber

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Drift chamber is the main tracking detector for high energy physics experiment like BESIII. Due to the high luminosity and high beam intensity, drift chamber is suffer from the background from the beam and electronics which represent a computing challenge to the reconstruction software. Deep learning developments in the last few years have shown tremendous improvements in the analysis of data especially for object classification. Here we present a first study of deep learning architectures applied to BESIII drift chamber real data to make the hit classification of the background and signal.

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