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Neural Network corrections for particle identification in ALICE

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The calibration of detectors in heavy-ion experiments is key to the measurement of several physics observables. Corrections must be applied to the expected detector signal in order to account for changes in environmental or hardware conditions over time and in different spatial regions. The use of neural network-based corrections trained on clean input signals allows this to be performed with a multidimensional approach. In this presentation I will introduce the neural network techniques used to parametrise the expected energy loss of charged particles in the ALICE Time Projection Chamber, which is crucial for reconstructing particle signals from their decay products.

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