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Fast simulations of jet performance of future EIC experiments.[1]
SEAN PREINS, University of California, Riverside — We present a study of the jet performance of future EIC detectors. We use the Delphes3 program to perform fast simulations of detector response in high Q2 DIS events simulated with Pythia8. We use the detector parameters and geometry established as reference in the EIC yellow report. We investigate the potential to tag jets with neutral hadrons using the energy-flow algorithm as implemented in Delphes3. We focus on studying the impact of the hadronic calorimeter resolution on and coverage, especially on the central detector region. Our results will help guide future studies with detailed Geant-4 simulations.

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