## ML4Jets2023



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## Reconstructing and calibrating hadronic objects with ML/AI algorithms in ATLAS

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Experimental uncertainties related to the calibration of hadronic objects (particularly the jet energy scale and resolution) can limit the precision of physics analyses at the LHC, and so improvements in performance have the potential to broadly increase the impact of results. Such settings are among most promising for cutting-edge machine learning and artificial intelligence algorithms at the LHC. Recent refinements to reconstruction and calibration procedures for ATLAS hadronic object reconstruction & calibration using ML and in situ techniques result in reduced uncertainties, improved pileup stability and other performance gains. In this contribution, new developments in this area will be presented.

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