

Phenomenology 2025 Symposium



Contribution ID: 91

Type: **not specified**

Jet calibration with in-situ pileup suppression

Tuesday 20 May 2025 14:15 (15 minutes)

We present a method to suppress pileup and calibrate hadronic jet energy at L1 triggers using boosted decision trees for regression and classification. The fwX platform is used for implementation of BDTs on FPGA within the necessary timing and resource constraints. The in-situ pileup suppression can improve trigger performance in the high pileup environment of the HL-LHC.

Mini Symposia (Invited Talks Only)

Plenary (Invited talks only)

Author: ROCHE, Stephen (Saint Louis University)

Co-authors: CARLSON, Benjamin (Westmont College); HEMMETT, Michael (Westmont College); HONG, Tae Min (University of Pittsburgh (US))

Presenter: ROCHE, Stephen (Saint Louis University)

Session Classification: Machine Learning

Track Classification: Machine Learning and Artificial Intelligence in Particle Physics