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[322] Improving sensitivity to jetty physics by using tracks: ATLAS evolution from the LHC to the HL-LHC

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Over the course of LHC Run 2, physics at the LHC has been shifting gradually into a high-luminosity mode, where the rate of data-accumulation outweighs any advances in the energy frontier. Augmented luminosity comes at the cost of increased pileup. Already a challenge, pileup will be the foremost problem for analysis at the HL-LHC, necessitating new strategies in detector design and event reconstruction. This presentation will review recent and impending advances in the ATLAS experiment's offline and trigger jet reconstruction such as particle flow and pileup reduction using hardware tracking, and their impact on hadronic physics.

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