



MEETING OF THE AMERICAN PHYSICAL SOCIETY DIVISION OF PARTICLES AND FIELDS

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Using the Jets-without-Jets Algorithm to Model MET in an ATLAS Level-1 Trigger Algorithm

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The Jets-without-Jets algorithm presents a novel approach to the determination of jet observables without the need for timely jet reconstruction. Because it relies on a set of simple sums, the algorithm is well suited to the kinds of fast real-time calculation that are required for a trigger algorithm. Following the current data taking period, the global feature extractor (gFEX) will be incorporated into the ATLAS Level-1 calorimetry trigger system. The capacity of the gFEX to process information from the whole calorimetry system on a single board makes it ideal for the determination of whole event quantities. This presentation will discuss the development of a trigger algorithm that uses the Jets-without-Jets algorithm and the gFEX to model missing transverse energy (MET).

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Session Classification: Computing, Analysis Tools, and Data Handling

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