

Abstract Submitted  
for the APR21 Meeting of  
The American Physical Society

**Studies of Hadronic Trigger Background Composition at ATLAS**

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ATLAS COLLABORATION — The ATLAS detector at the LHC uses a custom  
two-level trigger system to save 1 kHz of events from a 40 MHz bunch-crossing rate.  
It is of interest to be able to predict trigger rates using Monte Carlo simulations. The  
transverse momentum of jets and missing transverse energy of Pythia simulations  
with different hard-scatter truth jet pT ranges were normalized to data selected  
using the jet trigger. This gives effective correction factors and is an appealing  
method for deriving rate estimates. This method is presented as a better process  
for simulating rates than the current method, which only uses minimum bias Monte  
Carlo simulation.

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Date submitted: 06 Jan 2021

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