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**Determination of the Jet Energy Scale at ATLAS using Z+Jet Events** JAMIE HORTON, MIKE VETTERLI, Simon Fraser University, ATLAS COLLABORATION — A correct energy calibration for jets is essential to the success of the ATLAS experiment. In this talk the missing transverse energy projection fraction method, an in-situ jet energy calibration currently being used in the ATLAS detector will be discussed. In particular preliminary results using this method in events where a Z-boson balances a jet in transverse momentum will be shown. The response derived from these events can be used to complement a response derived in gamma-jet events for low transverse momentum, as well as a method for separating the responses for jet initiated by quarks and gluons. These quark and gluon responses will allow for a selection specific jet energy calibration to be derived for individual physics analysis based on the composition of the jets being observed.

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